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ABSTRACT

This manual, which provides extensive new instructions for administering the Functional Assessment Inventory (FAI), is intended to enable counselors to begin using the inventory without undergoing any special training. The first two sections deal with the need for functional assessment and issues in the development and use of the inventory. The individual items, check mark blanks, and strength items included in the inventory are described, and instructions for using them are outlined. Discussed in a section on the development of the FAI are its reliability, normative information, strength items, concurrent validity, use in assessing the dimensions of and change in functional limitations, and predictive validity. The fifth section examines the following companion instruments in the Functional Assessment System: the Personal Capacities Questionnaire, the Rehabilitation Goals Identification Form, and the Personal Guide to Rehabilitation Goals. A reference list concludes the guide. Copies of the actual Functional Assessment Inventory, scoring sheet, and administration instructions are appended. (MN)

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FUNCTIONAL ASSESSMENT INVENTORY MANUAL

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FOREWORD

For almost a decade, the Functional Assessment Inventory has been undergoing field testing and revisions. This new edition, published by the University of Wisconsin-Stout, reflects the time and thoughtful comments of many participants in that process. Compared with earlier editions, a major change involves elimination of two problematic items ("Coordination" and "Persistence") and the addition of two new ones ("Need for Specialized Placement or Accommodations" and "Initiative and Problem-Solving Ability"). In addition, some minor changes in the wording of existing items have been made to eliminate ambiguity and to focus content more clearly on work-related behaviors. For example, "Effective Interaction with People" has become "Effective Interaction with Employers and Co-workers."

Extensive new instructions for administration have been written, and these have led to revisions in the FAI "Instructions" insert. It is our hope that a careful reading of the manual will enable the interested counselor to begin using the inventory without the need for special training.

Appreciation is due to many individuals who have participated in the testing and revision of the FAI, and any listing is sure to omit many who deserve recognition. However, we would particularly like to acknowledge the contributions of the field counselors and supervisors in the Wisconsin Division of Vocational Rehabilitation and the California Department of Rehabilitation; Bridget Robins and Wayne Olson who served as liaisons with our staff; William Sather who helped to establish the first field test in Wisconsin and provided generous and detailed commentary; Charles Sawyer and the counselors of the New Hampshire Division of Vocational Rehabilitation who provided valuable suggestions regarding revision of items; David McCaffrey for years of dedicated research assistance; Ralph Turner of Abt associates for his direct participation in research, and Richard Melia and Rod Pelton of NIHR whose support for research on the FAI has enabled us to reach this point of completion. We are also indebted to Karl Botterbusch of the Materials Development Center for his assistance in preparing the manuscript for publication.

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FAI MANUAL

May, 1983

Nancy M. Crewe, Ph.D. & Gary T. Athelstan, Ph.D.

SECTION I: NEED FOR FUNCTIONAL ASSESSMENT

The Functional Assessment Inventory (FAI) grew out of work that began at the University of Minnesota's Department of Physical Medicine and Rehabilitation in 1973 (Crewe, Athelstan, and Meadows, 1975; Crewe & Athelstan, 1979 and 1981). The authors, who are practitioners and teachers in rehabilitation psychology, recognized the need for a system that would help counselors assess the vocationally relevant strengths and limitations of their clients in an efficient and comprehensive fashion. They observed that novice counselors often seemed overwhelmed by the complexity of disabilities and even experienced professionals sometimes approached assessment in a fragmented and incomplete way. The FAI, then, was designed to provide a structure for identifying areas in which information might be needed and to organize and quantify those data when they were collected. The result would be an evaluation of the client's behavioral capacities together with key environmental factors. The information could be used to create rehabilitation plans that better suited the person and that would be less vulnerable to unanticipated obstacles.

A number of research and administrative needs also spurred development of the FAI. One was the need for a better definition of severe disability. The 1973 Rehabilitation Act mandated priority services for severely disabled persons. However, there was little basis except medical diagnosis for determining who qualified for that category. Unfortunately, since the persons within any diagnostic category might differ tremendously from each other in their capacities and limitations, the diagnostic label was a poor basis on which to make decisions about priorities. Furthermore, it provided little, if any, information that would be useful in selecting appropriate services or goals. In contrast, functional assessment potentially could provide an operational definition of severity and also furnish information relevant to rehabilitation needs.

Work on the FAI led to the development of some companion instruments which came to be called collectively the Functional Assessment System. The Personal Capacities Questionnaire (PCQ) is an item-by-item translation of the FAI into first person terms so that it can be completed by the rehabilitation client. This instrument is intended to tell the counselor how the client views his or her own vocational capacities. It can help to ensure that no significant problem areas are overlooked, and it can also provide a basis for discussing differences in client and counselor perceptions.

The Rehabilitation Goals Identification Form and the Personal Guide to Rehabilitation goals, the remaining instruments in the FAS, are adaptations of Goal Attainment Scaling methodology (Kiresuk & Sherman, 1968). They supply a technique for translating functional limitations identified on the FAI or PCQ into behavioral, measurable, and individual rehabilitation goals. Use of these instruments, therefore, firmly ties the process of functional assessment to service planning and outcome measurement. Nevertheless, any of the instruments can be used independently of the others.

For a variety of reasons functional assessment has recently attracted increasing attention in the rehabilitation community. The state of the art in functional assessment was investigated by means of a Delphi study and a conference sponsored by the Rehabilitation Services Administration. The final report of that study (Indices, 1978) identified multiple user groups and needs, and it summarized a variety of functional assessment instruments that were in the process of development. Two years later Abt Associates continued the process with an invitational symposium and another report (Turner, 1980). That study also included a look at functional assessment as it applies to independent living rehabilitation. The Institute on Rehabilitation Issues selected functional assessment as one of its three study topics for the year 1982-83, and a book will be produced at the conclusion of the project. The FAI has been represented in all of these studies. Clearly, there has been growing national recognition of the need for functional assessment in vocational rehabilitation and for tools to expedite the process.

SECTION II: ISSUES IN THE DEVELOPMENT AND USE OF THE FAI

1. What do we mean by functional assessment?

In simplest terms, we mean a systematic enumeration of vocationally relevant strengths and limitations. This is not a new concept: all counselors go through a similar process in vocational planning. The difference between formal functional assessment and traditional approaches is primarily in its comprehensiveness. The use of a particular instrument may also provide standardized data that would not be available otherwise.

Some counselors worry that systematic functional assessment is rigid and mechanical--just the opposite of the way a professional should work. This is not true. In fact, a structure may actually contribute to increased freedom and flexibility. For example, a physician is trained to follow a specific format in taking a patient's history and conducting a physical examination. This routine not only avoids errors of omission, but also saves the doctor from worrying repeatedly about what areas have been covered and what questions remain to be answered. Within the structure there is ample latitude to respond flexibly to the information provided.

2. Is functional assessment equivalent to using a particular inventory such as the FAI?

No, functional assessment is a way of understanding a client and laying the foundation for sound vocational planning. While much of this is done early in the rehabilitation process, it continues as the client improves in response to services and as new needs arise. To think of it as simply writing down a set of numbers on a form is to lose sight of its essential purpose.

3. How were the items on the FAI selected?

The FAI was developed in a counseling center that serves persons with severe physical or psychiatric disabilities. The authors reviewed the files of about 150 clients and recorded areas that had been identified as potential barriers to work. The list was extended during discussions with experienced counselors and organized into a checklist. After several revisions we converted the checklist to behavioral rating scales. The strength items were added in order to direct attention to special assets that a client might possess.

We debated whether to include items such as family support which are actually characteristics of the social or environmental context rather than of the client. Technically, functional assessment refers to identification of personal strengths and limitations. Practically, however, vocational plans and outcomes are greatly affected by such factors as economic disincentives, the labor market, and societal attitudes. Therefore, we elected to include such areas in the FAI.

4. Should functional assessment focus on strengths or limitations?

We concluded that attention must be given to both if the process is to be complete and useful. The philosophy of rehabilitation requires identifying and building on the client's assets. Nevertheless, problems must also be recognized so that appropriate services can be provided to reduce or eliminate them. To some degree, capabilities and limitations are opposite sides of the same coin: the absence of a limitation implies normal functioning in that area which is an asset to be utilized in planning.

5. What is the FAI intended to do?

First, it is intended to provide a framework that will stimulate counselors to view their clients in a comprehensive manner and to conduct a thorough evaluation before launching into a vocational plan. Although limitations are correlated to some degree with medical diagnosis, the FAI may remind practitioners to go beyond the obvious concerns and look at the whole person regardless of label. For example, strength and endurance are important questions for any person who has had a heart attack. But for a particular person with heart disease, poor interpersonal skills, impaired memory, or lack of motivation to work might be even more critical in determining the outcome of rehabilitation services. If systematic functional assessment has been carried out, the counselor and the client will be alert to such concerns early enough to provide services that address them or to develop a plan that works around such shortcomings.

Second, the FAI may be useful as a way of documenting client characteristics that relate to decisions about eligibility for rehabilitation services. The result could be more consistent decisions among counselors within an agency as well as decisions that are easier to justify to consumers and other interested parties.

Third, the FAI may offer a more reliable and accurate basis for identifying individuals who are severely disabled than do diagnostic labels. It also provides a means of describing the population of consumers served in terms of their functional limitations. If such descriptive information were kept by an agency over time, it could reveal changes in the client group receiving services. For example, a change in closure rates might be related to the degree of disability in the client population.

Fourth, functional limitations may be related to and predictive of important rehabilitation measures such as the kinds of services needed, costs of service, or rehabilitation outcome.

Finally, when used in combination with the Personal Capacities Questionnaire (the functional assessment survey designed to be filled out by the rehabilitation client) it provides a way of comparing counselor and client perceptions. Such information can be discussed in counseling to the benefit of both participants.

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6. What will the FAI not do?

The FAI will not replace either psychometric testing or work evaluation. Both of those techniques generate data about clients by placing them in standardized situations and providing a means of recording their behavior. The FAI does not create information about clients. Instead, it furnishes a method for systematically identifying what kinds of information may be needed and then for organizing that information when it has been gathered through clinical interviews, medical records, observation, testing, or any other means.

7. Will the FAI measure changes in client functioning?

There are no research data upon which to base an answer to that question. Our best guess, however, is that it will not be especially useful for that purpose. One reason is that the FAI is a general survey that identifies unchangeable limitations as well as those which may respond to rehabilitation services. Furthermore, it focuses on characteristics of the person and the environment which may be related to but are not the same as rehabilitation outcomes. For example, while changes in mobility or in vocational skills may be significant in and of themselves, a more critical issue may be the behavioral results of such changes--did the person become more productive, more socially active, or more independent?

Another reason for skepticism regarding the FAI as a change measure is that the items are structured in terms of a four point scale ranging from no significant impairment to very severe impairment. The categories are therefore quite broad, and there may be room for significant improvement in functioning that would not entail a change from one level of the scale to another. A final concern is that the rating process involves a degree of subjectivity, even though we tried to anchor the items as clearly as possible with behavioral referents. Counselor judgment plays a part in the ratings, and it would be difficult to remain objective if there were an incentive to show improvement.

SECTION III: DESCRIPTION AND INSTRUCTIONS FOR USE

GENERAL

The FAI ratings should emphasize function or performance. The primary purpose of the inventory, assessing an individual's capacity for work or other productive activity, determined the level of specificity of the items. The benchmarks chosen to describe the various levels of impairment also reflect the vocational emphasis of the inventory. While the authors selected descriptive points that they considered critical, judgment is inevitably required in order to fit individuals into the available categories. In a particular case, if the appropriate rating is not clear on the basis of the behavioral descriptors, the levels may be regarded as presenting the following scale: (0) approximately normal or average functioning; (1) mild impairment; (2) moderate impairment; and (3) severe impairment. A rating of "0" should be used whenever the trait or quality being rated is within the normal range of variability and is unlikely to affect the client's vocational options or potential. Unless otherwise specified, the ratings should reflect the person's current level of functioning, utilizing whatever adaptive equipment may be available to him or her. Record only one score per item.

Four broad categories of impairment obviously represent a compromise in the description of complex human beings. Some items may not be detailed enough to satisfy counselors working with special populations. For example, four levels of visual impairment may seem far too gross to counselors working in agencies for the blind. However, in order to apply to all vocational rehabilitation clients, the items needed to cover a wide range of functions and needed to be readily useable without requiring burdensome assessment procedures. Also, they needed to be broad enough to be reliable, so that two counselors, looking at the same person, would be likely to arrive at the same decision about the most appropriate rating. Certainly, when service needs indicate, the counselor is free to carry out more detailed evaluation in selected areas than that entailed in the FAI.

Because employability depends on more than an individual's personal characteristics, the inventory also includes a number of social and environmental items. Although these items are not actually measures of functional capacities or limitations, the authors believe that they must be considered in the vocational planning process. Furthermore, they may contribute to the prediction of vocational outcomes.

Reducing functional limitations in selected areas may be among the intermediate goals of vocational rehabilitation services. For any one client, some of the limitations that are identified on the FAI may be permanent, and the vocational plan will simply have to work around them. In other areas, functioning may be improved through services. A space is provided on the answer sheet for the rater to check the limitations falling into the latter category.

INDIVIDUAL ITEMS

1. Learning Ability

0. No significant impairment.
1. Can learn complex, employable skills but not at a normal rate of speed.
2. Can master fairly complex ideas and operations with special training.
3. Is capable of learning only very simple tasks and then only with time and repetition.

INSTRUCTIONS: This item deals with "general" learning ability, even though we recognize that a person may learn one kind of material more easily than another or may learn through one modality more rapidly than another. The central issue is the person's capacity for acquiring employable skills. People with average or above average intelligence who are able to acquire new information through "standard" training procedures would be rated as 0. A client who could be expected to get along in a community college or vocational school program without requiring tutoring or other accommodations related to learning ability would be rated as 0. Those who can learn complex skills if they are given some extra time would be rated at level 1. This would include most people who would score in the dull normal or borderline range on an individual test of general intelligence. It would also include people of average or better general intelligence who have special problems with learning; for example, those who have been diagnosed as learning disabled. Another example would be the person with a mild to moderate deficit of recent memory resulting from a closed head injury. In order to benefit from any formal training program, they would need to be given a reduced load, tutorial help, and/or additional time to complete requirements. Level 2 includes the people who can master fairly complicated ideas and operations but who need special training methods in addition to increased time in order to do so. People classified as educable mentally retarded would most often be rated at this level. They probably would have been in special classes during elementary or secondary school. In general, academic training programs would not be appropriate for these clients. Instead, they would be directed toward on-the-job-training where they could learn by seeing and doing rather than by reading about the work. Other groups that might be rated at this level include people with a learning disability so severe that they would require a highly specialized training program and those with fairly serious recent memory deficits. Level 3 would include those with more severe limitations of learning ability including most people at the trainable level of mental retardation or lower. This reference to levels of measured intellectual function is meant simply to clarify the categories. A counselor need not have an IQ score in hand in order to judge limitation on this item. Furthermore, there are many causes of learning impairments that are not directly related to intelligence. For example, a person with a normal IQ may be unable to cope with a training program because of confusion and drowsiness resulting from seizure medication. Another individual might be unable to learn because of the distraction caused by extreme anxiety. Someone else might have been an average learner prior to the onset of blindness but find themselves virtually unable to master new information without the use of sight.

In making the rating, do not give priority to the person's "native ability" but rather reflect their present capacity to absorb new learning.

2. **Ability to Read and Write in English**

   0. **No significant impairment.**
   1. **Has some difficulty reading or writing the English language due to lack of education or foreign language background; or cannot read standard print due to vision but can use Braille or large print.**
   2. **Has considerable difficulty with reading or writing the English language.**
   3. **Is unable to read or write English in print or Braille.**

   INSTRUCTIONS: The focus of this item is on fluency with English since impairment in the use of this language represents a serious vocational limitation in our culture. Clients rated at level 1 display some difficulty with reading or writing the English language. If a reading test is available, the score would be below 9th grade level. The individual would be able to read newspapers and popular magazines, but would have difficulty with more technical or lengthy material. Another reason for rating a client at level 1, even if reading ability is average, would be significant difficulty with writing. The person would be unable to succeed in a job or training program that required frequent writing of reports because of poor composition, grammar, spelling, or excessive slowness. Some people for whom English is a second language may fall into this category, although those with adequate skills in English would be rated at level 0, even if it were a second language. People who need Braille or large print are also rated as having some degree of impairment (specified within the item itself) because they are cut off from so much standard literature. Level 2 would be the most appropriate rating for a person with a reading level between 3rd and 6th grade. Such persons would be able to read simple materials (for example, the want ads) and would be capable of filling out an uncomplicated kind of application form such as might be used by a factory. They would also be capable of following street signs well enough to get around in a city. Most people who would be rated at level 3 are functionally illiterate. They would not be able to read well enough to follow simple written instructions or write enough to fill out an application blank alone. Level 3 would also be the most appropriate rating for someone with a severe visual impairment who may have been capable of reading in the past but is no longer able to perceive print, even with low vision aids, and who has not learned to read Braille. Although they are not illiterate in the same sense as someone who has never learned to read, they are nevertheless incapable at this time of obtaining information from printed sources.

3. **Memory**

   0. **No significant impairment.**
   1. **Occasional memory deficit causes some difficulty.**
   2. **Memory deficit interferes significantly with new learning. Information or directions must be repeated frequently.**

3. **Is confused or disoriented. Remembers very little from day to day.**

INSTRUCTIONS: The focus of this item is on recent (i.e., short-term) memory since that is so important for new learning and day-to-day functioning. Individuals rated at level 1 have a memory impairment that is significant enough to interfere to some extent with everyday living. It is not intended to reflect the occasional absent mindedness that characterizes most people. For example, one client became very poor at remembering names and faces after being injured in an automobile accident. He lost his job as a bartender because he continually failed to recognize regular customers--they took offense, and business fell off. Level 2 is appropriate for people whose lives are more broadly affected by memory problems. If they fail to write down appointments, they forget them. They cannot go shopping, even for a few items, without a written list. They forget most of what they read or hear within a short time, so any new learning would be very slow and tedious. If the memory impairment is so severe that the person is confused and disoriented, a rating of 3 would be appropriate. This is sometimes seen in severe cases of neurological disability, brain injury, or psychiatric disability. The person may have good recall for events that happened many years ago, but their present life is in disarray because they cannot remember what they did yesterday. In the relatively unusual case of a person who has adequate recent memory but has an impairment of distant memory such as amnesia, the rater should make a judgment about whether the problem seems vocationally insignificant and should be rated at level 0, or whether it represents a minor problem (level 1); a moderate one (level 2); or a severe one (level 3). As with other items in this inventory, limitations should be rated without regard to etiology. For example, a memory deficit may be due to extreme anxiety rather than brain damage or intellectual limitations, and the extent of the problem should be evaluated, rather than its cause.

4. Spatial and Form Perception

0. **No significant impairment.**
1. **Difficulty with perception interferes with tasks requiring fine discrimination.**
2. **Occasionally gets lost or shows other evidence of perceptual loss in daily living.**
3. **Extreme perceptual distortion evidenced by behavior (e.g., becoming lost even in familiar places, running into walls, or inability to identify objects).**

INSTRUCTIONS: This item concerns the ability to integrate and comprehend sensory information. Such aptitudes are related to the General Aptitude Test Battery (GATB) aptitudes of Spatial Ability (S), Form Perception (P); and Clerical Perception (Q). Aptitude S is described as the ability to comprehend the movement of forms in space and to understand the relationship of plane and solid objects. In other words, it refers to the ability to visualize two and three dimensional objects. Form perception is defined as the ability to perceive pertinent detail in objects or pictorial or graphic material. It includes the ability to make comparisons and to see slight differences in the shape and shading of objects and the width and length of lines. Clerical perception is the ability to perceive pertinent detail in verbal or tabular material, to proofread accurately and to avoid making perceptual errors in arithmetic calculations (United States Employment Service, 1979). All of these tasks involve the interpretation of visual information, and they are relevant to many kinds of occupations such as drafting, dressmaking, and proofreading. In more general terms, perception also includes the ability to make use of information from other senses in order to orient oneself and interpret the environment. Perceptual tasks are apt to be a problem for many persons with brain injury, especially those with damage to the nondominant hemisphere. Sometimes the damage is congenital or the cause is unknown. People with learning disabilities, for example, may perceive letters or words as reversed, making reading exceedingly difficult. Brain injury can also be acquired through head trauma, stroke, or other causes. In cases of subtle acquired impairment, the individual may no longer be able to enjoy activities such as jigsaw puzzles, needlework or macrame because they are too frustrating. They may complain of their eyes becoming "tired," but the real problem is that they are unable to follow or create patterns. Similar problems may be apparent if they try to do automotive or other kinds of mechanical repair; the pieces just don't go back together correctly. Laying out a pattern on fabric, reading a map, putting down a tile floor, and following instructions in order to assemble something are further examples of the kinds of tasks that could be difficult or impossible depending on the severity of perceptual impairment. At increasing levels of severity, problems may be apparent in carrying out routines of daily living. For example, buttons on a shirt or coat may be misaligned or make-up may be lopsided. If the individual is asked to copy a design, it is likely to be noticeably distorted. It will be very difficult for the individual to find his or her way around new territory or to learn the route to new destinations. With extremely severe impairment (level 3) the individual may become lost even in familiar surroundings and have difficulty recognizing objects and faces. If asked to fit geometric cutouts into a formboard, performance may be largely trial and error.

For a person with severe visual impairment, this rating must also take into account ability to utilize other sense for interpreting the environment. Some degree of impairment would always be noted because the individual who cannot see is clearly at a disadvantage in making certain kinds of discriminations. Visually impaired persons rated at level 1 are skilled at recognizing objects by touch. They are able to orient themselves and to find their way from place to place. They are effective at taking in new information using auditory or other means. At level 2, such individuals would have significantly more difficulty than their peers in using other senses to substitute for vision, and if the problem is extremely severe, level 3 would be warranted.

5. **Vision**

   0. **No significant impairment.**
   1. **Has difficulty handling work involving fine visual detail.**
   2. **Impairment is sufficient to interfere with major activities such as driving or reading.**

3. **Total or nearly total loss of vision (uses cane for mobility outdoors).**

INSTRUCTIONS: The category of Vision includes more than just acuity (how far the client can see). Limitations of visual field, difficulty with eye coordination or the ability to focus, or problems with depth perception or color vision are examples of problems that might also affect the rating on this item. Whether the physical impairment is in the eye itself or in other structures such as the brain is not important to the rating. The critical question is, "How much difficulty does the individual have taking in visual information?" The rating should reflect the client's level of functioning while using any correction (e.g., eyeglasses or contact lenses) that he or she possesses. Formerly, acuity guidelines were provided for each level of impairment, but these have been removed because they proved to be confusing rather than helpful. In general, individuals who have some visual problem that would make it hard for them to handle work involving fine detail would best be rated at Level 1. Some examples include a person with slight nystagmus resulting from multiple sclerosis who would find it difficult to work in a job with large amounts of paper work; the person whose color blindness would rule out jobs such as an electronic assembler; the individual with one eye who could not do work requiring depth perception; or the person who wears strong corrective lenses but is still unable to do work involving visual inspection. However, each of these persons is still able to drive a car and to read standard print, at least in limited quantities. People most appropriately rated at level 2 have greater restrictions in terms of vocational options or activities of daily living. They may need to use large print or low vision aids in order to read. They would not qualify for a driver's license because of poor vision. People who would be rated at level 3 have little or no vision. They may have a small amount of useable vision (for example, see print if it is held up close and brought into a very narrow visual field, or recognize familiar people if they are very near), or they may be unable to see at all. Ordinarily, they would need a cane or a guide dog in order to travel safely outside.

6. Hearing

0. **No significant impairment.**
1. **Has some difficulty understanding conversation or using a telephone.**
2. **Can handle face-to-face conversation with the help of lipreading, but is unable to use a standard telephone. Is unable to pick up certain environmentally relevant sounds (e.g., bells or high-pitched tones).**
3. **Extremely hard-of-hearing or deaf; or is unable to comprehend any speech.**

INSTRUCTIONS: This item refers primarily to the ability to perceive and understand sound, especially the human voice. The rating should reflect functioning while using any available assistance such as a hearing aid. If the person has no hearing aid at the time the evaluation is being done, rate according to current function. Then, if the client should receive an aid as part of rehabilitation services, a functional assessment at the time of closure should reflect this improvement. In addition to hearing, per se, this item should also reflect receptive language problems if they exist. If a person is unable to comprehend verbal communication, the impact is comparable whether the problem is due to deafness or to a problem such as receptive aphasia. Often a person is impaired only in one ear. Raters should still focus on the amount of functioning the person retains. For example, if the person is able to compensate using the one good ear to the extent of having little or no difficulty with conversation or the telephone, a "0" rating would be appropriate despite the existence of a definite medical impairment. Functional abilities differ quite widely in persons with the same degree of measured impairment, so some individuals may not clearly fit one rather than another of the alternatives provided. In general, level 1 is the best choice for people who have enough impairment that their vocational options are limited to some degree. They would be placed under significant burden in some occupations. An individual who would need special amplification in order to use a telephone comfortably would be rated at level 1. Another example of that level would be a professor who has difficulty participating in large classroom discussions or following committee deliberations. A waitress who sustained a mild hearing loss might be unable to accurately take orders in a busy dining room, and she should also be rated at level 1. All of these people would be capable of hearing ordinary conversation with one or two other people if they were in fairly quiet surroundings. People who would be rated at level 2 include those who have some ability to hear sound in the conversational range, but whose hearing is so poor that they would have to rely on lipreading or facial expressions or gestures to enable them to understand conversation. Because of the need for those visual cues, they would not be able to use a telephone without the aid of an interpreter. They would also tend to miss other environmental sounds such as bells or whistles. Such individuals would probably be unable to manage jobs that involved substantial exchange of information with groups of people, but they might communicate reasonably well on a face-to-face basis. People rated at level 3 are those who are extremely hard of hearing or deaf. They may be able to hear extremely loud noises, but they would not be able to hear speech.

7. Speech

0. **No significant impairment.**
1. **Speech is easily intelligible, but voice quality or speech pattern is distracting; or speech can be easily intelligible with special effort (e.g., taking care to talk slowly).**
2. **Speech is difficult to understand. Repetition is often necessary.**
3. **Speech is not useable as a means of communication.**

INSTRUCTIONS: This item overlaps to some extent with "Language Functioning," but problems in one area do not necessarily imply limitations in the other. For example, an individual with cerebral palsy might have great difficulty producing intelligible speech but be fully able to understand English and to communicate in writing. In that case, he or she might be rated as 2 on Speech and 0 on Language Functioning and Ability to Read and Write. Many other conditions also interfere with speech production such as a laryngectomy or paralysis of part of the speech musculature. Conversely, it is possible that a person might be impaired with regard to use of the English language but have no impairment of speech itself. For example, he or she may be able to converse fluently and clearly in another language.

8. **Language Functioning**

   0. **No significant impairment.**
   1. **Ability to communicate orally in the English language may be slightly to moderately impaired. If hearing-impaired, is able to use lipreading and speech to communicate.**
   2. **Has considerable difficulty communicating. Is limited to single words or short phrases or to simple concepts that can be communicated nonverbally. If hearing-impaired, uses sign language effectively but does not lipread or speak.**
   3. **Verbal communication is nearly impossible.**

   INSTRUCTIONS: This item focuses on the client's ability to use the English language in verbal communication. Level 1 indicates a mild impairment and would include people who have some conditions that limit but do not preclude them from communicating verbally with potential employers and co-workers. For example, a person who was born in another country and is not fully fluent in English would receive this rating. A person with some word finding difficulties as a result of stroke or a psychiatric patient whose language is somewhat garbled or circuitous would be other examples. Level 1 would also include people with impaired hearing who have the ability to communicate using oral techniques. Individuals rated at level 2 have considerable difficulty communicating with most people. This would include people who are able to speak only a very limited amount of English (even though they may understand substantially more). It would also be the best rating for those who are hearing impaired and are unable to communicate orally but who do use sign language effectively. For individuals rated at level 3, verbal communication is largely impossible. This category would include people who speak little or no English, even if they are fluent in another language. It would also include people who have receptive as well as expressive aphasia due to brain injury. This category would also include those with hearing impairment who use neither oral techniques nor sign language effectively.

9. **Upper Extremity Function**

   0. **No significant impairment.**
   1. **Partial or total loss of functioning in one upper extremity. The other is intact and functions well.**
   2. **Loss of function to at least some extent in both upper extremities; or severe loss of functioning in dominant side.**
   3. **No useful functioning in either upper extremity.**

   INSTRUCTIONS: Upper extremity function refers mainly to shoulder and arm strength and usefulness. Level 1 should be used for people who have partial or total loss of functioning in one upper extremity but whose other is intact and functioning well. The "good" arm is either the dominant one or has been effectively trained to function in that capacity. For example, a right-handed person who had left-sided hemiparesis as the result of a stroke might be rated at level 1 on this item.

If there is severe loss of function on the dominant side and the other extremity has not substantially compensated, a rating of 2 would be appropriate. Level 2 would also be used for people who have lost a significant amount of function in both upper extremities. An example might be a person whose arms are substantially limited by arthritis. Level 3 would be most appropriate for a person such as a quadriplegic who has very little function in the upper extremities.

10. Hand Functioning

0. No significant impairment.
1. Would be unable to perform most tasks requiring fine dexterity, speed, or coordination.
2. Seriously impaired, but with or without the use of aids or prostheses can write and perform activities of daily living, such as feeding.
3. Little or no hand functioning.

INSTRUCTIONS: Dexterity, eye-hand coordination, speed, strength, and range of motion all play a part in determining the rating on this item. Rather than measuring these physical characteristics, however, the item reflects the way that they affect performance, individually or in combination. People rated at level 1 would be capable of doing most ordinary manual activities, but at below average rate of speed or skill. The restriction would be serious enough to rule out most skilled trades and many involving manipulation of hand tools and machinery that require fine dexterity to operate. Although people at level 1 might be capable of using a sewing machine, typewriter or lathe for personal ends, they would not be able to meet competitive standards of speed, accuracy, or consistency with such tools. People who are rated at level 2 would have more severe limitations of hand function. Jobs requiring a significant amount of reaching, grasping or manipulation would be unsuitable because these clients may be quite limited in strength or voluntary motion. However, they are at least able to use their hands to perform basic self-care skills, perhaps with assistive devices. They can dress and feed themselves and write. People rated at level 3 have such limited hand use that they cannot carry out these self-care tasks. An example would be a high quadriplegic who is dressed by his attendant and who uses a mouthstick for writing. Judgment will be required in rating an individual who can carry out some self-care tasks but needs help with others. If the help is needed for just one or two specific activities (e.g., trimming nails or buttoning cuffs) a rating of 2 is most appropriate. The need for more substantial and regular help indicates that a rating of 3 is more appropriate. Hand function also has special relevance to people who use Braille for reading. Diabetes, which is a common cause of visual problems, also may cause progressive loss of sensitivity in the hands. It would be appropriate to rate such individuals at level 1 if they have sensory impairments that interfere with their ability to learn or use Braille. If they have sensory problems which are so severe as to prevent their using Braille at all, they should be rated at level 2. Level 3 would not be an appropriate rating solely in terms of difficulty using Braille; it is reserved for persons whose hand function is so impaired as to prevent them from carrying out activities of daily living such as feeding and dressing themselves.

11. **Motor Speed**

0. **No significant impairment.**
1. **Moves more slowly than average.**
2. **Moves very slowly.**
3. **Extreme motor retardation.**

INSTRUCTIONS: Some clients, including many with mental retardation, brain injury, neurological diseases, or those taking heavy medications exhibit a generalized slowing of motor function. People who would be rated at level 1 are somewhat below average in speed of movement, so competitive jobs that require physical speed (for example, working on an assembly line) would typically not be appropriate for them. At level 2, workers could handle production tasks quickly enough to meet sheltered workshop standards. Those who are rated at level 3 would probably work too slowly to meet such standards. It should be noted that a rating of 2 does not mean that the client is capable of doing only sheltered work. People with almost any degree of motor slowing might be able to succeed in competitive positions which do not require physical speed but instead emphasize other traits such as creative ideas, management skills, communication abilities, etc. References to sheltered workshop standards on production tasks are provided only as a benchmark for delineating levels of motor speed. If paralysis or weakness affects speed in some muscle groups while leaving others intact, the rater should make a judgment as to whether the impairment seems insignificant (level 0) or represents a mild (level 1), moderate (level 2), or severe (level 3) limitation for that person. People who are quadriplegic would ordinarily be rated at level 2 or 3 on this item.

12. **Ambulation or Mobility**

0. **No significant impairment.**
1. **Mild impairment, but does not require assistance from others to get around in the community.**
2. **Moderate impairment. Sometimes requires help from others in order to get around in the community.**
3. **Severe impairment. Usually requires assistance from others in order to get around in the community.**

INSTRUCTIONS: Because of the diverse impairments that can limit mobility, this item became the most complex one in the inventory. The functional theme across all rating levels concerns the extent of assistance that a person needs in order to get around in the community. At level 1, people experience some limitations in mobility, but they are generally able to get around the community without help from other people. Examples might include a blind person who generally travels independently but whose impairment sets some limits on the extent or frequency of travel; or a lower extremity amputee who is limited in the speed or distance of walking. People at level 2 have more severe limitations in mobility and may often need help from others in order to get around in the community. Examples may include a person with cerebral palsy who walks only very short distances using crutches; a mentally retarded person who needs to be accompanied on travel in the community except when using certain familiar routes; or a person with spinal cord injury who is able to transfer into a wheelchair and operate it independently in a relatively barrier-free environment. People rated at level 3 are those who are essentially homebound unless they have assistance from other people. This would include quadriplegics who need assistance in transferring into or out of their chairs, even if they can operate them independently thereafter. (In earlier versions of the FAI the guidelines regarding wheelchair users were different than the ones given above. Revision was indicated because virtually no community is so barrier free as to make wheelchair use only a mild impairment of mobility.) Notice that the diagnostic categories used above are simply examples; people with varying degrees of the same impairments would be rated at different levels on the scale. In other terms, the guidelines for this item may be stated as follows: Level 1: a) persons with limitations in speed or distance of walking; b) persons with a visual, cognitive, or any other impairment that mildly affects their mobility but who are still capable of getting around in the community on their own. Level 2: a) persons who do not use a wheelchair but who can walk only for very short distances over flat surfaces; b) persons who use a wheelchair independently in a relatively barrier-free environment (i.e., they get into and out of it and propel it without assistance); or c) persons with a visual, cognitive, or any other disability that sometimes requires them to have assistance from others in order to get around in the community. Level 3: a) persons who use a wheelchair and need help getting into or out of it, but who are otherwise able to travel without help; b) persons who cannot get around in the community unless they have help from others.

13. Capacity for Exertion (See Instructions)

0. **No significant impairment.**
1. **May encounter some difficulties in occupations requiring substantial physical exertion (e.g., occupations requiring frequent lifting of 25 lbs. or a great deal of walking or bending). However, physical activity in moderate amounts is acceptable.**
2. **Occupations requiring moderately strenuous physical activity are ruled out. Limited to jobs classified as light by the Department of Labor.**
3. **Limited to sedentary jobs.**

INSTRUCTIONS: This item reflects a person's ability to perform physical labor. One could be impaired in this area for any of several reasons including muscular weakness, impaired cardiac status, pain, or mobility problems. Obviously, the ability to carry out physical work is also related to age and sex, so some clients (e.g., many older persons) may be rated as limited in this area for reasons that are unrelated to their disability. People who are capable of carrying out jobs classified as "medium" by the Department of Labor should be rated as 0. This means that they would be capable of lifting up to 50 pounds maximum and frequently lifting or carrying objects weighing up to 25 pounds. People who are rated at level 1 are likely to encounter difficulty with medium level jobs, however, they would be able to handle virtually any of the jobs rated as Light. According to the Department of Labor these jobs involve lifting 20 lbs. maximum with frequent lifting and/or carrying of objects weighing up to 10 lbs. This category also includes jobs that involve little or no lifting but which require substantial walking or standing, or when it involves sitting most of the time with a degree of pushing and pulling of arm or leg controls. People rated at level 2 would be able to meet the physical requirements for some light jobs, but they would not qualify for others. For example, many paraplegics would be able to do the light jobs that involve the specified degree of lifting, but they would have to rule out those which demand standing, walking, or the use of leg controls. People at level 3 would be limited to jobs that are classified as sedentary. These involve minimal lifting (10 lbs. maximum) and occasionally lifting or carrying ledgers or small tools. Some may also involve occasional walking or standing. Some clients may be so restricted as to be able to do only a selected portion of the sedentary jobs; they should still be rated as 3.

14. Endurance

0. No significant impairment.
1. Can work a full day with special rest periods arranged.
2. Can work only part-time (16 to 32 hours per week).
3. Unable to work for more than one or two hours a day (15 hours or less per week).

INSTRUCTIONS: This item concerns how much time a client is capable of working. Although it may be difficult to rate early in the rehabilitation process, it basically reflects whether the person is a candidate for a regular, full time job or whether something less taxing will be necessary. Individuals who are rated at level 1 can maintain a full-time job, but they need to modify their work schedule in some way to allow for rest periods, exercise breaks, special starting or ending times, or some other accommodation. It does not refer to regular coffee breaks or other allowances available to all employees. For example, a person with multiple sclerosis needed half-hour rest periods both morning and afternoon as well as an extended noon break when he could lie down and sleep. Since he was a technical writer and had considerable freedom to arrange his schedule, he began work at 8:00 with his co-workers but spread his working hours over a day that usually ended at 6:30 or 7:00 p.m. Another person who needed to have physical therapy every afternoon arranged for a "split shift" schedule, working for four hours in the morning and another four hours in the evening. Neither of these individuals would have been able to hold a job requiring a "standard" schedule. People who are rated at level 2 require a part time job (between 16 and 32 hours per week). Those who need a part-time job because they are unable to work on successive days should be rated at level 2, even if they are able to manage an eight hour day intermittently. Those rated at level 3 can work regularly for no more than a couple of hours a day or 15 hours a week.

15. Loss of Time from Work

0. No significant impairment.
1. Requires 1-2 days or parts of several days off each month for medical

supervision, therapy (including psychotherapy), or recurring medical problems.

2. **Requires an average of one day off each week.**
3. **Requires frequent or extended absences from jobs.**

INSTRUCTIONS: This item concerns the amount of time that an individual would be likely to miss from work once he or she obtains a job. It refers particularly to absence required by treatment or resulting from the disability, but this should be interpreted very broadly to include the full range of behavioral and physical causes of absence from work. For example, some people have a pattern of missing work because of depression, pain, carelessness or poor judgment. People rated at level 0 would be expected to miss no more time than a typical, satisfactory employee. Usually, that means an average of one day per month or less. Those at level 1 are expected to have higher than normal absenteeism, but less than one day per week. For example, a client with epilepsy experienced an average of 2-3 seizures a month. Afterwards she felt confused and tired. Sometimes she would lie down and rest for a couple of hours before going back to work, and other times she would go home for the remainder of the day. She was rated as 1 on this item. The person who misses an average of a day per week or about four days a month would be rated at level 2. People who are likely to be absent even more frequently or to have extended absences from the job would be rated 3.

16. Stability of Condition

0. **No significant impairment.**
1. **Stable if controlled by diet, treatment, or exercise.**
2. **Condition likely to be slowly progressive; or course is unpredictable and may result in further loss of functioning.**
3. **Condition is likely to worsen significantly in the foreseeable future.**

INSTRUCTIONS: This item refers to the prognosis for an individual's condition over time. In addition, it should take into account major fluctuations in functioning that are common with some disabilities (for example, mental illness and chemical dependency) and that could affect work status. People rated at level 0 would be those with "stable" disabilities which are not likely to become progressively worse. In some instances, people at this level may even be expected to improve with time. Some examples of disabilities that would ordinarily be considered stable are traumatic amputation, cerebral palsy, or mental retardation. People rated at level 1 are those with a disability that can be kept stable but that require some special attention such as diet, treatment, or exercise. If individuals in this category neglect their disabilities, they could become worse. Some examples might include milder forms of diabetes, epilepsy, or stable cardiac conditions. Ratings at level 2 are intended to include conditions which are expected to become gradually worse as well as those which are unpredictable and which carry the real possibility of becoming more serious in the future. Multiple sclerosis, for example, is one condition that would often be rated at level 2. Clients who have chemical dependency or psychiatric disability would often be rated at this level because of the possibility of recurrent episodes. If the individual has a condition that is likely to progress significantly in the foreseeable future, he or she would best be given a rating of 3. Muscular dystrophy and cystic fibrosis are examples of diseases which might often receive such a rating. Remember, however, that the condition of the individual client takes precedence over the diagnostic labels suggested above in making the rating.

17. Work History

0. **No significant impairment.**
1. **Has little or no work experience due to youth or other reasons acceptable to most employers; or had a good work record prior to disability, but has now been out of work for more than one year.**
2. **Work history includes negative aspects, such as frequent tardiness or frequent job changes with periods of unemployment.**
3. **Work history is a clear liability, possibly including long periods of unemployment and poor references.**

INSTRUCTIONS: Clients rated at level 0 are those who have worked in the past, including the recent past, and whose record is basically satisfactory. Persons rated at level 1 would include those who had a good work history but who have been out of work for a year or more by the time they are being seen for rehabilitation. Another group of clients who should be rated at level 1 are those who are quite young and who therefore have little or no work experience. Clients who are rated at level 2 may have a mixed work history that includes some negative aspects such as frequent job changes with some periods of unemployment. It may also be an appropriate rating for people who are middle aged or older and who have no work history to speak of. Individuals rated at level 3 have work histories that are clearly a liability. They may have a series of poor references, have been repeatedly fired from jobs, or have extended periods of unemployment.

18. Acceptability to Employers

0. **No significant impairment.**
1. **Some physical, demographic, or historical characteristics may interfere with client's acceptability to some employers.**
2. **Possesses characteristics which have a very low degree of employer and public acceptance, despite their lack of interference with performance (e.g., age, controlled epilepsy, or history of severe or recurring mental illness).**
3. **Current or recent characteristics which cannot be avoided or modified are likely to make this person unacceptable to most potential employers (e.g., recent criminal history, uncontrolled epilepsy, or noticeable behavior deviation).**

INSTRUCTIONS: This item is intended to reflect any of the characteristics that could influence employer receptivity toward the client. In other words, how much prejudice is he or she likely to encounter in the labor market? Some characteristics may be disability related. For example, a history of back problems could make a client difficult to place, even in a job that does not require physical exertion. Others may be social or demographic (e.g., ethnic background, middle or advanced age, or sexual preference.) Even though discrimination in these areas may be unlawful, the rater should indicate the extent to which they may realistically be expected to affect the client's prospects for employment. The level of acceptance for some conditions varies from one locality to another. For example, in some communities the use of a wheelchair might be enough to cause someone to be rated at level 1 whereas in another place it might not be a barrier at all (for employers trying to meet affirmative action guidelines, a qualified candidate with a visible disability may be an attractive commodity). In general, clients rated at level 1 are those who have some characteristic that is considered undesirable by a number of potential employers. For example, the client may be 40 years old and yet be seeking a job that is typically filled by a person half his age. Other examples may include the client who has a minor, but visible deformity, or the one who uses a prosthesis. Level 2 is the appropriate rating for people who have conditions that have a very low degree of employer acceptance, even though they may not directly interfere with the person's performance as a worker. Some examples include people with controlled epilepsy, severe stuttering, age in the 50's or above, obviously effeminate mannerisms in a male, and a history of a worker's compensation claim for a back injury. People rated at level 3 have current or recent characteristics such that most employers will not seriously consider them for positions. Some examples may include recent criminal history, severe cerebral palsy with communication barriers, uncontrolled epilepsy, or severe facial deformities.

19. Personal Attractiveness

0. **No significant impairment.**
1. **Some aspect of personal appearance or hygiene is unattractive to others but tolerable with familiarity.**
2. **Has more severe problems with personal appearance or hygiene that are difficult for others to accept even with familiarity.**
3. **Very severe problems with personal appearance or hygiene are likely to cause avoidance by others.**

INSTRUCTIONS: Personal attractiveness is a sensitive area and may be uncomfortable for some people to rate. It is also quite subjective, but is foolish to deny that a person who is very unattractive or seriously overweight, or who is sometimes incontinent or who has body odor is at a disadvantage in the labor market. This item is intended to reflect appearance and other personal characteristics that may cause people to avoid close contact. Since the counselor's reaction might be quite different from that of people who are not accustomed to working with disabled individuals, this rating should reflect the response that might be expected from a typical employer in that geographical area. Individuals rated at level 1 would have some aspect of personal appearance or hygiene that employers might initially find unattractive but which could be accepted once they became familiar with the person. Use of a wheelchair, prosthesis, or some kinds of deformities might fall into this category. Individuals at level 3 are those with very severe problems with personal appearance such as cerebral palsy with drooling or grimacing, severe disfigurement due to burns, uncontrolled laughing or shouting resulting from a psychiatric disability, or repeated incontinence or body odor. Persons rated at level 2 would have problems somewhere in between those levels just described.

20. Skills

0. No significant impairment.
1. No available skills that are job-specific. However, possesses general skills (i.e., educational or interpersonal) that could be used in a number of jobs.
2. Has few general skills. Job-specific skills are largely unuseable due to disability or other factors.
3. Has no job-specific skills and has very few general or personal skills transferable to a job situation.

INSTRUCTIONS: This item asks what a client has to offer a potential employer, either in terms of specific vocational skills or in terms of more general abilities such as organizational or administrative talent, ability to deal with the public, etc. It refers to the skills that an individual possesses at the time he/she is being rated. Level 0 would be used for the client who has some specific, marketable skill(s). This is infrequent, but not unheard of among clients entering the vocational rehabilitation system. For example, a client with a new disability may be able to return to his/her former job if hand controls and driving lessons can be provided to solve the transportation problem. In such a case, job skills are not a problem. People rated at level 1 would not possess any specific skills that would qualify them for particular jobs, but they would have some personal characteristics that could apply to a number of entry level jobs. For example, take a client with a congenital disability who never held a job during adolescence, but just completed a liberal arts degree with a major in sociology. Assets include above average intelligence, self-discipline, and good problem solving ability. These are valuable general skills that may win a job offer. The person rated at level 2 probably would not possess any outstanding personal assets such as a college degree or leadership skills. Instead, he/she is likely to be average in terms of intelligence, personality, and education. The client may have had some specific skills prior to the onset of disability, but now finds himself unable to return to the kind of work that he did before. For example, a long distance truck driver developed seizures after a bout of viral encephalitis. His drivers license was suspended, and he could not think of any other jobs he might be qualified to do. At level 3, the individual faces similar problems, but to an even more serious degree. For example, a client who had dropped out of school during the tenth grade and worked for several years in seasonal construction jobs. When he injured his lower back he knew that he could not continue doing that kind of labor. He spent the next two years trying to get relief through doctors, therapists, chiropractors, and pills, all the while becoming more and more restricted in his activities and more short-tempered in his behavior. By the time he began rehabilitation, it was difficult to think of any skills, either general or job-related, that he might be able to offer an employer.

21. Economic Disincentives

0. **No significant impairment.**
1. **Potential for employment is affected to some degree by economic disincentives (e.g., may need an unusually high salary or special conditions that could be difficult to find).**
2. **Job options are quite restricted because of potential loss of benefits (e.g., may choose to consider only part-time or low-income jobs that allow benefits to continue).**
3. **In all probability cannot afford to take a job or will choose not to take a job because of resulting loss of benefits (e.g., financial support, medical coverage, or attendant care).**

INSTRUCTIONS: Persons who would suffer significant losses of income, medical assistance, or other benefits if they went to work would be rated as having impairment on this scale. Clients who have economic disincentives significant enough to complicate the rehabilitation plan but who still have some hope for improving themselves economically by going to work would be rated at level 1. Quadriplegics who stand to lose public assistance for medical expenses and attendant care services may be in this category if they have professional training to qualify them for high-paying jobs. If they are untrained and limited to entry level jobs, they would probably be at level 2 or 3 on this item because they could not make enough to support themselves and cover these expenses too. Among the people who would be rated at level 2 are those who, in all likelihood, will have to restrict their options to part-time jobs or low income jobs so that their benefits can continue. Those rated in category 3 are clients who probably cannot afford to go to work or who will choose not to do so because of the resulting loss of benefits.

22. Access to Job Opportunities

0. **No significant impairment.**
1. **Employment opportunities are somewhat limited (e.g., due to transportation problems or geographic location.**
2. **Employment opportunities are significantly limited. Few accessible and appropriate work settings are available.**
3. **Extremely limited opportunities. May be homebound or living in an area where very few jobs exist.**

INSTRUCTIONS: This item is intended to reflect the number of suitable jobs that are available and accessible to the client. Many factors could impose limitations in this area. One is simply the client's place of residence. Is it in a city were many jobs are available or a rural area where very few possibilities exist? The economic conditions of an area may also affect the number of jobs available, and high unemployment in a region may pose a significant barrier. Transportation is another important contributor. Individuals who cannot drive and who cannot use available mass transportation are likely to have limited access to jobs.

23. **Requirements for Special Working Conditions**

0. **No significant impairment.**
1. **Placement options are limited to some degree by disability requirements. (e.g., may need freedom to sit, stand, and move around as needed, or may need to avoid exposure to dangerous equipment.)**
2. **Multiple environmental restrictions related to the disability substantially limit placement alternatives.**
3. **Capable of functioning only in highly selected settings. Special placement efforts essential.**

INSTRUCTIONS: This new item concerns the need for special placement or accommodations required by the disability or other special characteristics of the individual. The need could be based on either physical or mental limitations. Individuals rated at level 0 would be able to work in most settings for which their vocational training and experience prepared them. A lower extremity amputee who sought work as a computer programmer might be one example. At level 1, there would be significant restrictions on placement alternatives. For example, a person who uses a wheelchair would need work space that is architecturally accessible, or a person with low back pain may need freedom to get up and move around as necessary. A person with intellectual or behavioral problems may need close supervision or carefully structured arrangements for work. The individual rated at level 2 may either have multiple restrictions which limit the number of suitable placement alternatives or may require significant accommodations by an employer. For example, a person with a psychiatric disability and low tolerance for stress might need to be placed in a job with limited social contacts and minimal time pressures. At level 3, the individual's requirements are such that only a small proportion of the work settings that might ordinarily be used for his or her occupation would be tolerable. For example, an individual with severe allergies may be unable to tolerate the atmosphere that exists even in offices or other public places, to say nothing of factories. Aggressive placement efforts would usually be required to find work for an individual rated at this level.

24. **Work Habits**

0. **No significant impairment.**
1. **Is deficient in work habits (e.g., punctuality, ability to persist at work tasks with minimal supervision or appropriate interview behavior). However, is willing and able to learn these skills quite readily.**
2. **Work habit deficiencies may require that work adjustment training precede unemployment.**
3. **Has severe deficiencies in work habits and seems to have little potential for improving through work adjustment training.**

INSTRUCTIONS: Work habits refers to the person's ability to behave in such a way that he/she would be likely to obtain and then maintain a job. These things include punctuality, behavior appropriate to a work setting, appropriate dress, ability to stay on task without excessive supervision, and interviewing skills. This item is intended to reflect a composite picture of the client's capacity to function in a work setting. People rated at level 1 have some deficiencies, possibly due to lack of training or work experience, but they appear to have the potential and the desire to correct them with counseling or brief services. For example, one young client invariably wore the same faded blue jeans and flannel shirts that she had used all though high school. She was counseled regarding office attire prior to her interview with a large corporation. She was also very awkward about presenting her skills to employers, so the counselor also worked with her to develop a brief resume which she could include with her application. Her impairment was appropriately rated at level 1. People rated at level 2 have limitations that are substantial enough to require a period of work hardening or work adjustment training prior to placement on a job. One such client had a habit of being late for appointments, and the counselor was concerned that this might continue when he got a job. He had been out of work for two years and had become accustomed to slow, unhurried days. He also expressed little interest in doing a job that might be dull or repetitive, and there was considerable doubt about how he would respond to correction from a supervisor. Another example was a client who would stay at a task for only brief periods of time because of chronic low back pain. He needed a program of reconditioning and behavior modification to enable him to live with his pain and to work effectively in spite of it. At level 3, the limitations are so severe or entrenched that they may persist, even with work adjustment services. Perhaps the client has already been through such a program in the past with little apparent change or has been out of work for many years.

25. Social Support System

0. **No significant impairment.**
1. **Little or no support system available.**
2. **Support system at times encourages values or behaviors that are contrary to rehabilitation goals.**
3. **Support system is clearly working against rehabilitation behaviors.**

INSTRUCTIONS: "Social support system" refers to the client's family or close friends or to the people with whom the client lives (for example, others in a group home or institution). Individuals who are rated at level 0 have at least one person who is close and supportive of their efforts to become rehabilitated. Most of the individuals rated at level 1 would be those who have either no close family or friends or whose family and friends are indifferent about rehabilitation. If the counselor has indications that family and friends are tending to interfere with rehabilitation efforts at times, level 2 would be an appropriate rating, and if the resistance is consistent or overt the rating should be a level 3. Once again, if the picture is mixed, with some of the family or friends supporting rehabilitation goals and others working against them, the rater will need to mentally add up the factors and decide whether in balance the influence upon the client is positive and should receive a rating of 0, is neutral and should receive a rating of 1, is moderately negative (rating of 2), or is clearly working against rehabilitation goals and should be rated at 3.

26. Accurate Perception of Capabilities and Limitations

0. No significant impairment.
1. Has an inadequate understanding of what his or her vocational capacities are as a result of disability (e.g., may rule out too many vocational possibilities or deny the significance of some limitations).
2. Has an unrealistic understanding of his or her vocational capacities (e.g., may rule out all vocational possibilities or deny important limitations).
3. Refuses to accept or significantly distorts his or her limitations. Frequently gives others false, misleading or extremely inappropriate information about the disability.

INSTRUCTIONS: This item concerns the client's understanding of how the disability is likely to affect his/her vocational plans. Individuals rated at level 1 lack sufficient information about this matter, and as a result they may either underestimate or overestimate what they are able to do. Those rated at level 2 have goals that appear to be quite unrealistic or inappropriate. These goals may persist, even after contradictory information has been provided. People rated at level 3 insist on maintaining their own views of themselves and their goals, even when these may be quite counterproductive to rehabilitation progress. Some may cling to a virtually impossible objective while others may claim that they are too disabled to do anything at all. They may give others false or misleading information about their disability or their capacities.

27. Effective Interaction with Employers and Co-Workers

0. No significant impairment.
1. Is somewhat awkward or unpleasant in social interactions.
2. Lacks many of the skills necessary for effective social interaction.
3. Overtly aggressive, withdrawn, defensive, bizarre, or inappropriate behavior often impairs personal interactions.

INSTRUCTIONS: The client's skills in interpersonal relationships are reflected in this item, particularly as they apply to employers and co-workers. Some people can get along well with their friends but repeatedly get into conflicts with supervisors. These people would be rated as having a limitation, regardless of how pleasant they may seem to be in other circumstances. Conversely, other clients may have long histories of conflict (for example, with families) but get along well in work settings. These individuals might be rated as having no impairment on this item. Of course, some clients have little or no work history, so the counselor will have to make as accurate a judgement as possible based upon what can be observed in counseling or evaluation. Level 1 would be an appropriate rating for people who are somewhat awkward or unpleasant. Perhaps they have trouble meeting people and make a poor first impression, or they tend to be "loners" who stay to themselves in the work setting. They may seem ill at ease and so have difficulty making others feel comfortable. People rated at level 2 may be sarcastic, abrasive or argumentative and so find themselves in frequent conflict with people at work. Level 3 would be most appropriate for people whose behavior is sometimes bizarre, threatening, or extremely inappropriate. Although they may be able to conduct themselves well enough to obtain work, problems would become apparent with longer exposure.

28. **Judgment**

0. **No significant impairment.**
1. **Sometimes makes unsound decisions. Does not take time to consider alternatives or consequences of behavior.**
2. **Frequently makes rash or unwise decisions. Often displays inappropriate behavior or choices.**
3. **Could be dangerous to self or others as a result of foolish or impulsive behavior.**

INSTRUCTIONS: This item refers to an individual's ability to make sound decisions and to behave in a safe and appropriate manner. Persons rated at level 1 would tend to show a mild degree of impulsivity or rashness that sometimes results in unsound decisions or inappropriate behavior. They might be described as lacking in "common sense." They often fail to think before acting and they might be seen as gullible. They may tend to make unwise purchases or to change their mind about what they want. However, the consequences have not been especially harmful to date. Those rated at level 2 would show similar problems but to a more severe degree. They might leap to a vocational choice and not want to evaluate its wisdom. Other major life decisions may show similar lack of thought and result in considerable cost or trouble. Individuals rated at level 3 would need frequent or constant supervision for their own safety or the safety of others. They ought not to be living alone, but rather need to be in a structured situation. For example, an exceedingly forgetful or distractible person might leave water running or risk a kitchen fire. Another may be incapable of handling money and be in constant trouble with creditors. A person with psychological or mental disability might gravitate toward bad company and repeatedly get in trouble with the law or chemical abuse. These are a few examples of serious judgment problems that could prevent independent living and could also impair a person's employability.

29. **Congruence of Behavior with Rehabilitation Goals**

0. **No significant impairment.**
1. **Behavior with respect to rehabilitation program appears inconsistent (i.e., it varies from day to day or from one area to another).**
2. **May verbally agree with rehabilitation program but usually does not follow through with appropriate action.**
3. **Behavior is often in contradiction to goals of program.**

INSTRUCTIONS: This item is intended to reflect the client's motivation or desire to work. Rather than simply asking the rater to judge how much the client wants to work, it asks whether the client's behavior is facilitating or getting in the way of rehabilitation goals. This focus on observable behaviors is consistent with the rest of the FAI. The term "rehabilitation program" refers to the broadest purposes for the counselor's work with clients (e.g., vocational rehabilitation or independent living). It does not imply that specific occupational or personal goals have already been determined at the time of rating.

If the FAI is being completed prior to vocational evaluation or some other extended opportunity for observation, the rating would be based on such indications as the client's reliability in keeping appointments, promptness, follow through on homework tasks, and the degree to which he or she takes initiative in moving the rehabilitation process ahead. At level 1, the client has shown some behavior that raises concern about his/her whole hearted commitment to rehabilitation. Perhaps the person's behavior in counseling is appropriate and he/she seems eager to go ahead, but then without apparent good reason comes late for scheduled interviews. As another example, the client may be highly enthusiastic about the prospect of retraining but may resist considering the alternatives that would allow him to be directly placed in a new job using transferable skills that he already possesses. The client who gives more clear-cut evidence of reluctance to succeed in rehabilitation should be rated at level 2. He/she may frequently miss appointments or fail to prepare for them. For example, if you ask this person to prepare a resume or to review the Sunday help-wanted columns between interviews, the person either will admit that they did not do it or state that they did prepare but forgot to bring their notes along to the interview. At level 3, the individual does things that directly work against rehabilitation goals. For example, such clients may arrive for counseling interviews intoxicated or be tardy for job interviews. They may present their disabilities in such a way that employers would be very unlikely to consider hiring them. They may blame others (e.g., counselors, parents, teachers, society) for their problems rather than acknowledging responsibility for their own difficulties.

30. Initiative and Problem-Solving Ability

0. No significant impairment.
1. Is able to see alternatives and work effectively toward solutions to problems, but needs frequent direction and encouragement to take action.
2. Often needs help identifying tasks or solutions to problems, and needs repeated urging to take action.
3. Usually seems unable to identify tasks or possible solutions to problems. Needs constant urging to undertake tasks and seldom completes them without help.

INSTRUCTIONS: This new item refers to the person's ability to undertake a task or solve problems without being instructed or pushed by another person. It is closest in content to Item #29, Congruence of Behavior with Rehabilitation Goals. While that item taps a person's motivation or desire to work, this one is concerned with skill at independent problem solving. The ability to recognize problems or needs is the first component, followed by the ability to think of alternative actions or see possible solutions. Also important is the ability to start action of one's own accord. The individual rated at level 0 could be characterized as a "self-starter." He or she would need little or no guidance to recognize what needs to be done to reach a vocational goal and to act on that knowledge. The actions taken would be reasoned and generally appropriate. Persons with a rating of 1 on this scale may be able to clearly see the solution to a problem yet have low initiative. They would need stimulation from another person (particularly the counselor) to begin working on it. At level 2, clients are apt to need help identifying the tasks which need to be done as well as alternative solutions to problems. They would also be likely to need repeated urging to take action. This may also be the most appropriate rating for a person who lacks sufficient flexibility to consider alternative plans or solutions and remains wedded to a plan or goal that holds little hope of success. At level 3, the individual is likely to deal very ineffectively with problems or challenges. He or she has great difficulty recognizing options and choosing between them. Even when a plan is developed, the person may need constant prodding to act on it and may need tangible help to complete it.

THE CHECK MARK BLANKS

On the answer sheet after each of the functional limitations ratings scales there is a short blank available for a check mark. On each of the items where a client has been rated as having a significant limitation (levels 1, 2, 3,), consider whether that limitation is essentially unchangeable or whether it might be reduced through rehabilitation services. Place a check mark next to any limitation that you plan to or hope to affect by means of services that will be provided or purchased.

A primary reason for this procedure is to help link functional limitations assessment to service decisions. Another is to aid in exploring the question of how peoples' lives change as a result of rehabilitation services. In many cases, rehabilitation accomplishes more than just helping a person get back to work. Some people are better off physically as a result of physical restoration services. Others learn to function better socially or to feel better about themselves. Examination of patterns of limitation at the beginning and the end of the rehabilitation process could serve to describe how much limitations change and in what areas they change. It would be unrealistic to expect that all of the limitations that are identified by the inventory are going to be helped, so the check blank provides an opportunity for the counselor to identify, for each individual, the problems that may be modifiable.

STRENGTH ITEMS

31. Has an unusually attractive physical appearance.
32. Has an exceptionally pleasing personality.
33. Is extremely bright, or has an exceptional verbal fluency.
34. Possesses a vocational skill that is in great demand.
35. Has excellent educational credentials qualifying him or her for employment desired.
36. Client's family is exceptionally understanding and supportive.
37. Has sufficient financial resources to maintain self and family during period of rehabilitation.
38. Is extremely motivated to succeed vocationally.
39. Job is available for client with previous or current employer.

A client's assets are described in two ways by the FAI. Each of the first (30) scales which has been rated as 0 represents an area of normal, unimpaired functioning which can contribute to achieving vocational rehabilitation goals. In addition, the ten special strength items are intended to identify exceptional assets that may be so significant as to neutralize the impact of the disabilities. For example, if an employer is holding a job open for a person who has become disabled, that individual has excellent prospects for successful rehabilitation, even if his or her disabilities are quite severe. The strength items, then, may serve as moderator variables, possibly improving the prediction of vocational potential.

The strength items are not formulated as behavioral rating scales. Instead, the rater should simply read each one and check off any descriptions that apply to the client. Because they focus on extreme characteristics, many people will not fit any of the items. In most other cases, only one or two may apply, but occasionally more may be appropriate. There is no or two may apply, but occasionally more may be appropriate. There is no need to expect or to try for any specific number of checks in this area.

SECTION IV - DEVELOPMENT OF THE FUNCTIONAL ASSESSMENT INVENTORY

Findings reported in this section have been obtained from four field tests:

1. The first began in 1978 with 30 counselors from the Division of Vocational Rehabilitation (DVR) and private rehabilitation agencies in Minnesota. Participants were trained in one-day sessions to use the inventory, and they later administered it to a series of their new clients. Altogether, 351 usable forms were submitted. Some three years later, closure data were obtained through DVR on these cases. Since the clients of the private agencies were included in the DVR system, no separate follow-up procedures were required. At the time of this printing, this is the only sample for which functional limitations can be related to outcome.

2. The second field test was provided by Wisconsin DVR. Late in 1980 agency administrators decided to include the FAI as part of their standard evaluation procedure on all new clients. FAI developers conducted several training sessions for field supervisors, and the supervisors, in turn, provided training for their counselors. Training included background information about the purpose of functional assessment, a review of the FAI items, and one or two sample ratings based upon videotaped interviews and simulated case records. The training took place during January and February, 1981, and counselors began applying the instrument in March, 1981. This manual includes data from 1,716 consecutive forms submitted through July, 1981. The Minnesota test involved a fairly small number of volunteer counselors and their clients, but the Wisconsin data reflect the total population of counselors and clients within this state for the time period covered. Considering the differences in the way these two samples were provided, it is interesting to note their similarities in demographic characteristics. Table 1 compares them on age and sex and shows striking correspondence.

3. The third sample of clients was provided by the Minneapolis Society for the Blind (MSB). Although the number is small (60), it was important to include these results because they represent a population not included in the Minnesota or Wisconsin DVR samples. In both of these states, clients with visual impairments are served by a separate agency rather than by DVR. As shown in Table 1, this sample is older than the DVR samples. The mean age is almost 39, and the modal age is 34 (compared with 17 and 18 years for the Minnesota and Wisconsin samples, respectively). Unlike the others, the MSB sample also has a slight majority of females.

Table 1 compares characteristics of the subjects in the first three samples. (Note that the age and sex characteristics of the two DVR samples correspond very closely). Inventories from the three field tests described above were identified by code number and processed at the University of Minnesota's Rehabilitation Research and Training Center.

Table 1

Characteristics of Subjects in the Field Tests by Minnesota DVR, Wisconsin DVR, and the Minneapolis Society for the Blind

Characteristic		Sample				
	Minnesota		Wisconsin		MSB	
Age: Range	16-63		12-81		14-70	
Mean	31.2		30.7		38.8	
S.D.	11.9		12.1		16.7	
Median	28		27		34	
	N	%	N	%	N	%
Sex: Male	219	62.4	1045	60.9	28	46.7
Female	131	37.3	640	37.3	32	53.3
Missing Data	1	.3	31	1.8	0	
Total Number	351		1716		60	

4. The fourth test was conducted by Abt Associates, a consulting firm in Cambridge, Massachusetts. This study stemmed from the decision by the Rehabilitation Services Administration (RSA) to include functional assessment in its new Management Information System (MIS). Two national conferences laid the groundwork for their choice of the FAI as a data collection instrument, but further study was deemed necessary to test its reliability and its application to various disability groups and to clients in other parts of the country. Therefore, late in 1981 California and Wisconsin volunteered to participate in the "MIS Pretest." The study also involved creation and testing of the Life Functioning Index which described client status in terms of five key life areas: living arrangement, social interaction, communication, education, and vocation. That part of the Pretest will not be described here.

   Abt developed a nested sampling design, and 119 counselors were selected on the basis of their caseload type and location. During a four month collection period, the counselors provided data on all of their 1,318 clients with the specified disabilities. Wisconsin samples included clients with the following primary diagnoses: orthopedic/amputation, mental illness, developmental disabilities, and chemical dependency. California provided data on clients with visual impairments, hearing impairments, mental illness, and chemical dependency.

The MIS Pretest data were analyzed by Abt Associates and published in their monograph Functional Assessment in VR Clients: A Pretest (1982). Some of their findings are reported in this manual with permission.

INTERRATER RELIABILITY

Prior to the field tests just described, the FAI underwent reliability testing at the University of Minnesota Hospitals. An initial series of 14 live interviews was observed by varying pairs of counselors, and the FAI was completed by each one. Agreement between the observers was checked, and items on which there was disagreement were discussed. When indicated, the coding instructions were revised to reduce the degree of subjectivity in the ratings. Later, a new series of 25 interviews was observed and rated by pairs of counselors, but discrepancies were not discussed. This series showed that 75% of the ratings made by the pairs of observers were identical, and another 22% differed by only one point on the four point scale. A third series of clients was then rated with similar results, and the authors concluded that interrater reliability of the inventory was satisfactory.

Reliability was again evaluated as part of the MIS Pretest study. Fifty-four counselors were randomly selected to participate in this task. They read case materials and watched a videotaped interview and then completed the FAI. Two different cases were used, but each counselor saw only one of them. FAI ratings for each tape were analyzed using Chronbach's alpha and standardized item alpha analysis. The report (Turner, 1982) stated:

> "For Tape 1, the reliability coefficient alpha was .788 and the standardized item alpha was .809. For Tape 2, the reliability coefficient alpha was .803 and the standardized item alpha was .806...It can be concluded with some certainty that, taken as a whole, the FAI is reliable, and that the individual items were scored reliably as well." (p.55)

NORMATIVE INFORMATION

Functional Limitations Scales

Table 2 shows the distribution of item ratings on each functional limitations scale for the Wisconsin, Minnesota, and Minneapolis Society for the Blind samples. Since it is based upon a large number of consecutive admissions, it should be representative of the scores expected in a DVR population. While a higher proportion of clients in the Wisconsin sample were described as having limitations, the patterns of scores between the Wisconsin and Minnesota DVR samples were quite similar. The most common problems were: skills, work history, acceptability to employers, access to job opportunities, capacity for exertion, and stability of condition. Vision, hearing, and language were rather infrequent items. Table 2 also contains score distributions for the Minneapolis Society for the Blind (MSB). Numerous differences were apparent between the MSB sample and the Wisconsin DVR sample. All MSB clients had moderate or severe levels of visual impairment. In addition, they are more likely to have impairment of mobility, loss of time from work, access to job opportunities, and economic disincentives. In addition, virtually all of them are seen to face barriers in terms of acceptability to employers, compared with less than two thirds of the DVR clients. Conversely, the MSB clients less often had impairments in the areas of learning ability, judgment, persistence, congruence of behavior with rehabilitation goals, effective interaction with people, and work habits.

Table 3 gives the distributions of the total Functional Limitation (FL) scores (i.e., the sum of the scores on the 30 functional limitation scales) for the same three samples. The Wisconsin sample ranged from 1 to 56 points, with a mode of 5 and a mean of 12.26. The Minnesota scores were divided into two broad categories of physical and behavior, according to primary diagnoses. This division was to test the possible need for separate norms and scales for different disability groups. The physical disabilities subgroup included clients with the following problems: orthopedic, amputation, cardiac, diabetes, and other diseases. The behavioral disability subgroup included those clients whose primary impairment was recorded as mental illness, mental retardation, or chemical dependency. A higher proportion of very low FL scores were earned by clients in the "physical subgroup" and the total mean score for that subgroup was 14.63 as compared with 18.36 for the behavioral subgroup. The MSB distributions are also given on Table 3. The range from 7 to 33 was narrower, probably a reflection of the smaller size and greater homogeneity of the sample. Their mean of 15.72 was between the Wisconsin and Minnesota samples.

Table 2

Frequency of Functional Limitations for Wisconsin DVR (N=1716), Minnesota DVR (N=351) and Minneapolis Society for the Blind (N=60)

	Item		Score 0		Score 1		Score 2		Score 3		
Number	Name	Samples	N	%	N	%	N	%	N	%	NA
1.	Vision	Wisconsin	1557	90.8	87	5.1	47	2.7	24	1.4	1
		Minnesota	321	91.5	27	7.7	3	.9	0	0	
		MSB	0	0	0	0	33	55.0	27	45.0	
2.	Hearing	Wisconsin	1604	93.5	60	3.5	27	1.6	24	1.4	1
		Minnesota	332	94.6	15	4.3	3	.9	1	.3	
		MSB	54	90.0	6	10.0	0	0	0	0	
3.	Mobility	Wisconsin	1229	71.7	356	20.8	94	5.5	35	2.0	1
		Minnesota	244	69.5	91	25.9	12	3.4	4	1.1	
		MSB	20	33.3	19	31.7	19	31.7	2	3.3	
4.	Upper Extremity	Wisconsin	1492	87.0	145	8.5	72	4.2	6	.3	1
		Minnesota	281	80.1	41	11.7	29	8.3	0	0	
		MSB	56	93.3	2	3.3	2	3.3	0	0	
5.	Hand Functioning	Wisconsin	1464	85.3	193	11.2	47	2.7	12	.7	0
		Minnesota	260	74.1	79	22.5	12	3.4	0	0	
		MSB	46	76.7	12	20.0	2	3.3	0	0	
6.	Coordination	Wisconsin	1406	81.9	247	14.4	55	3.2	8	.5	0
		Minnesota	250	71.2	89	25.4	9	2.6	3	.9	
		MSB	51	85.0	9	15.0	0	0	0	0	
7.	Motor Speed	Wisconsin	1255	73.1	346	20.2	103	6.0	12	.7	0
		Minnesota	193	55.0	113	32.2	38	10.8	7	2.0	
		MSB	48	80.0	10	16.7	2	3.3	0	0	
8.	Capacity for Exertion	Wisconsin	891	52.0	515	30.1	270	15.8	36	2.1	0
		Minnesota	123	35.1	155	44.3	64	18.3	8	2.3	
		MSB	21	35.0	19	31.7	18	30.0	2	3.3	

Table 2 (continued)

Item Number	Item Name	Samples	Score 0 N	Score 0 %	Score 1 N	Score 1 %	Score 2 N	Score 2 %	Score 3 N	Score 3 %	NA
9.	Endurance	Wisconsin	1181	68.9	389	22.7	103	6.0	41	2.4	2
		Minnesota	200	51.1	110	31.4	32	9.1	8	2.3	
		MSB	36	60.0	12	20.0	11	18.3	1	1.7	
10.	Loss of Time from Work	Wisconsin	1251	72.9	370	21.6	44	2.6	51	3.0	0
		Minnesota	248	70.7	83	23.6	9	2.6	11	3.1	
		MSB	22	36.7	32	53.3	5	8.3	1	1.7	
11.	Stability of Condition	Wisconsin	649	37.8	723	42.1	326	19.0	18	1.0	0
		Minnesota	124	35.3	140	39.9	83	23.6	4	1.1	
		MSB	15	25.0	11	18.3	30	50.0	4	6.7	
12.	Learning Ability	Wisconsin	1169	68.1	267	15.6	193	11.2	86	5.0	1
		Minnesota	192	54.7	62	17.7	58	16.5	39	11.1	
		MSB	48	80.0	8	13.3	4	6.7	0	0	
13.	Perceptual Organization	Wisconsin	1397	81.4	271	15.8	43	2.5	5	.3	0
		Minnesota	269	76.6	72	20.5	10	2.8	0	0	
		MSB	49	81.7	7	11.7	4	6.7	0	0	
14.	Memory	Wisconsin	1417	82.6	233	13.6	62	3.6	4	.2	0
		Minnesota	268	76.4	73	17.9	19	5.4	1	.3	
		MSB	52	86.7	6	10.0	2	3.3	0	0	
15.	Language	Wisconsin	1504	87.6	156	9.1	38	2.2	17	1.0	1
		Minnesota	298	84.9	46	13.1	4	1.1	3	.9	
		MSB	58	96.7	2	3.3	0	0	0	0	
16.	Ability to Read & Write	Wisconsin	1316	76.7	236	13.8	124	7.2	40	2.3	0
		Minnesota	245	69.8	58	16.5	30	8.5	18	5.1	
		MSB	51	85.0	7	11.7	2	3.3	0	0	
17.	Speech	Wisconsin	1513	88.2	144	8.4	34	2.0	23	1.3	2
		Minnesota	298	84.9	33	9.4	18	5.1	2	.6	
		MSB	54	90.0	6	10.0	0	0	0	0	

Table 2 (continued)

Number	Item Name	Samples	Score 0		Score 1		Score 2		Score 3		
			N	%	N	%	N	%	N	%	NA
18.	Judgment	Wisconsin	1007	58.7	550	32.1	134	7.8	25	1.5	0
		Minnesota	156	44.4	126	35.9	57	16.2	12	3.4	
		MSB	46	76.7	14	23.3	0	0	0	0	
19.	Persistence	Wisconsin	1176	68.5	429	25.0	89	5.2	22	1.3	0
		Minnesota	206	58.7	118	33.6	24	6.8	3	.9	
		MSB	50	83.3	9	15.0	1	1.7	0	0	
20.	Congruence of Behavior	Wisconsin	1230	71.7	371	21.6	79	4.6	36	2.1	0
		Minnesota	220	63.0	96	27.5	23	6.6	10	2.9	
		MSB	53	88.3	6	10.0	1	1.7	0	0	
21.	Accurate Perception of Capacities	Wisconsin	1067	62.2	518	30.2	112	6.5	19	1.1	0
		Minnesota	156	44.4	153	43.6	34	9.7	8	2.3	
		MSB	36	60.0	23	38.3	1	1.7	0	0	
22.	Effective Interaction	Wisconsin	1120	65.3	408	23.8	147	8.6	40	2.3	1
		Minnesota	163	46.6	119	34.0	45	12.9	23	6.6	
		MSB	52	86.7	8	13.3	0	0	0	0	
23.	Social Support System	Wisconsin	1183	68.9	423	24.7	94	5.5	14	.8	2
		Minnesota	222	63.2	89	25.4	33	9.4	7	2.0	
		MSB	46	76.7	13	21.7	1	1.7	0	0	
24.	Personal Attractiveness	Wisconsin	1427	83.2	259	15.1	23	1.3	6	.3	1
		Minnesota	244	69.5	99	28.2	7	2.0	1	.3	
		MSB	52	86.7	8	13.3	0	0	0	0	
25.	Skills	Wisconsin	642	37.4	678	39.5	288	16.8	108	6.3	0
		Minnesota	67	19.1	146	41.6	96	27.4	42	12.0	
		MSB	17	28.3	21	35.0	19	31.7	3	5.0	
26.	Work Habits	Wisconsin	1175	68.5	369	21.5	151	8.8	20	1.2	1
		Minnesota	199	56.7	80	22.8	66	18.8	6	1.7	
		MSB	56	93.3	3	5.0	1	1.7	0	0	

Table 2 (continued)

	Item		Score 0		Score 1		Score 2		Score 3		
Number	Name	Samples	N	%	N	%	N	%	N	%	NA
27.	Work History	Wisconsin	635	37.0	741	43.2	270	15.7	69	4.0	1
		Minnesota	134	38.2	122	34.8	66	18.8	29	8.3	
		MSB	22	36.7	34	56.7	1	1.7	0	0	
28.	Acceptable to Employers	Wisconsin	637	37.1	770	44.9	237	13.8	70	4.1	2
		Minnesota	73	20.8	170	48.4	73	20.8	35	10.0	
		MSB	1	1.7	45	75.0	14	23.3	0	0	
29.	Access to Job Opportunities	Wisconsin	861	50.4	623	36.4	171	10.0	55	3.2	6
		Minnesota	164	46.7	133	37.9	42	12.0	12	3.4	
		MSB	7	11.7	39	65.0	14	23.3	0	0	
30.	Economic Disincentives	Wisconsin	1394	81.4	234	13.7	61	3.6	24	1.4	3
		Minnesota	260	74.1	58	16.5	28	8.0	5	1.4	
		MSB	31	51.7	14	23.3	10	16.7	5	8.3	

Table 3

Total Functional Limitations (FL) Scores for Wisconsin DVR, Minnesota DVR (Divided into Primary Disability: Physical vs. Behavior) and Minneapolis Society for the Blind Sample

Total FL	Wisconsin			Minnesota						MSB		
				F		%		Cum. %				
Score	F	%	Cum. %	Phy	Beh	Phy	Beh	Phy	Beh	F	%	Cum. %
0	0	0	0	0	1	.0	.7	.0	.7	0	0	0
1	25	1.5	1.5	2	1	1.2	.7	1.2	1.3	0	0	0
2	45	2.7	4.1	0	0	.0	.0	1.2	1.3	0	0	0
3	62	3.7	7.8	8	1	4.7	.7	5.8	2.0	0	0	0
4	92	5.3	13.2	5	2	2.9	1.3	8.8	3.3	0	0	0
5	120	7.0	20.3	12	2	7.0	1.3	15.8	4.6	0	0	0
6	110	6.5	26.8	7	5	4.1	3.3	19.9	7.9	0	0	0
7	120	7.1	33.9	10	3	5.8	2.0	25.7	9.9	4	6.7	6.7
8	88	5.2	39.1	17	8	9.9	5.3	35.7	15.2	0	0	6.7
9	88	5.2	44.2	18	9	10.5	6.0	46.2	21.2	4	6.7	13.3
10	106	6.2	50.5	10	4	5.8	2.6	52.0	23.8	7	11.7	25.0
11	86	5.1	55.6	8	3	4.7	2.0	56.7	25.8	3	5.0	30.0
12	92	5.4	61.0	3	9	1.8	6.0	58.5	31.8	3	5.0	35.0
13	74	4.4	65.4	3	11	1.8	7.3	60.2	39.1	3	5.0	40.0
14	68	4.0	69.4	8	13	4.7	8.6	64.9	47.7	5	8.3	48.3
15	59	3.5	72.9	3	9	1.8	6.0	66.7	53.6	5	8.3	56.7
16	45	2.7	75.5	5	5	2.9	3.3	69.6	57.0	2	3.3	60.0
17	41	2.4	77.9	6	5	3.5	3.3	73.1	60.3	5	8.3	68.3
18	44	2.6	80.5	9	7	5.3	4.6	78.4	64.9	1	1.7	70.0
19	38	2.2	82.8	2	6	1.2	4.0	79.5	68.9	6	10.0	80.0
20	38	2.2	85.0	0	3	.0	2.0	79.5	70.9	2	3.3	83.3
21	31	1.8	86.8	5	4	2.9	2.6	82.5	73.5	1	1.7	85.0
22	27	1.6	88.4	4	2	2.3	1.3	84.8	74.8	0	0	85.0
23	31	1.8	90.3	1	3	.6	2.0	85.4	76.8	0	0	85.0
24	22	1.3	91.6	2	6	1.2	4.0	86.5	80.8	1	1.7	86.7
25	19	1.1	92.7	2	1	1.2	.7	87.7	81.5	1	1.7	88.3
26	14	0.8	93.5	5	2	2.9	1.3	90.6	82.8	2	3.3	91.7
27	14	0.8	94.3	1	5	.6	3.3	91.2	86.1	2	3.3	95.0
28	14	0.8	95.2	0	1	.0	.7	91.2	86.8	1	1.7	96.7
29	13	0.7	95.9	1	2	.6	1.3	91.8	88.1	0	0	96.7
30	8	0.5	96.4	1	2	.6	1.3	92.4	89.4	1	1.7	98.3

Table 3 (continued)

Total Functional Limitations (FL) Scores for Wisconsin DVR, Minnesota DVR (Divided into Primary Disability: Physical vs. Behavior) and Minneapolis Society for the Blind Sample

Total FL	Wisconsin			Minnesota						MSB		
				F		%		Cum. %				
Score	F	%	Cum. %	Phy	Beh	Phy	Beh	Phy	Beh	F	%	Cum. %
31	9	0.5	96.9	0	0	.0	.0	92.4	89.4	0	0	98.3
32	9	0.5	97.5	3	3	1.8	2.0	94.2	91.4	0	0	98.3
33	9	0.5	98.0	2	0	1.2	.0	95.3	91.4	1	1.7	100.0
34	6	0.4	98.3	1	3	.6	2.0	95.9	93.4			
35	4	0.2	98.6	2	0	1.2	.0	97.1	93.4			
36	2	0.1	98.7	0	2	.0	1.3	97.1	94.7			
37	0	0	98.7	0	0	.0	.0	97.1	94.7			
38	3	0.2	98.9	0	1	.0	.7	97.1	95.4			
39	2	0.1	99.0	0	2	.0	1.3	97.1	96.7			
40	2	0.1	99.1									
41	6	0.4	99.5	1	0	.6	.0	97.7	96.7			
42	0	0	99.5	0	3	.0	2.0	97.7	98.7			
43	2	0.1	99.6	1	1	.6	.7	98.2	99.3			
44	4	0.2	99.8	1	0	.6	.0	98.2	99.3			
45	0	0	99.8	0	0	.0	.0	98.2	99.3			
46	0	0	99.8	1	0	.6	.0	99.4	99.3			
47	2	0.1	99.9	1	0	.6	.0	100.0	99.3			
48	0	0	99.9	0	1	.0	.7	100.0	100.0			
49	0	0	99.9									
50	0	0	99.9									
51	0	0	99.9									
52	0	0	99.9									
53	0	0	99.9									
54	0	0	99.9									
55	0	0	99.9									
56	1	0	100.0									

Wisconsin	Minnesota		MSB
	Phy	Beh	
N = 1716 (missing 21)	N = 173 (2 missing)	152 (1 missing)	N = 60
Mean = 12.26	Mean = 14.63	18.36	Mean = 15.72
Mode = 5.00			Mode = 10.
SD = 8.10	SD = 9.37	9.42	SD = 6.21

STRENGTH ITEMS

The strength items are presented in the form of a checklist rather than as behavioral rating scales. Table 4 indicates the number and percent (or proportion of the items checked) in each of the three samples. The most common item checked for the Wisconsin sample was item 38 "extremely motivated to succeed." Vocational skills, excellent education, and an available job with a past employer were rare assets. The pattern of strength items checked is remarkably consistent for the Wisconsin and Minnesota samples. The MSB sample's most commonly used item was 32, "exceptionally pleasing personality."

Table 5 gives the frequency distributions of the total number of strength items checked for the three samples. In the Wisconsin sample, almost half of the clients had no checks, indicating no exceptional strengths. The rest of the distribution yielded a positively accelerated curve from 1 to 10 strengths. The mean number checked was 1.13 and the standard deviation of the distribution was 1.73. The Minnesota sample was again divided into the physical and behavioral groups, as described above. Note that while the mode for both groups was 0, the mean number of strengths checked for the clients with physical problems (1.47) was almost twice that of people in the behavioral categories (.82). While the mode (0) and the mean (1.10) of the items for the MSB sample is identical and similar, respectively, to the mode and mean of the other two samples, the standard deviation was less, reflecting a narrower range of strengths.

Table 4

Frequency of Strength Items Checked for Wisconsin DVR (N=1716), Minnesota DVR (N=325) and Minneapolis Society for the Blind (N=60) Samples

	Strength Item	Wisconsin		Minnesota		MSB	
		N	%	N	%	N	%
31.	Unusually attractive physical appearance	204	11.9	31	9.5	2	3.3
32.	Exceptionally pleasing personality	339	19.8	52	16.0	13	21.7
33.	Extremely bright or verbally fluent	232	13.5	42	12.9	6	10.0
34.	Has vocational skill in great demand	97	5.7	15	4.6	4	6.7
35.	Excellent educational credentials	88	5.1	8	2.5	3	5.0
36.	Exceptionally supportive family	323	18.8	47	14.5	9	15.0
37.	Sufficient financial resources	214	12.5	70	21.5	8	13.3
38.	Extremely motivated to succeed	531	30.9	95	29.2	9	15.0
39.	Job available with past employer	91	5.3	13	4.0	8	13.3
40	Other*	130	7.6	5	1.5	4	6.7

*Note: Item 40, "Unusual initiative and problem solving ability" was added to the inventory after the Minnesota field test.

Table 5

Total Numbers of Strength Items Checked for Wisconsin DVR (N=1716), Minnesota DVR (N=325) and Minneapolis Society for the Blind (N=60) Samples

Number of Strength Items Checked	Wisconsin			Minnesota						MSB		
				F		%		Cum. %				
	F	%	Cum. %	Phy	Beh	Phy	Beh	Phy	Beh	F	%	Cum. %
0	792	46.2	46.2	76	85	43.9	55.9	43.9	55.9	30	50.0	50.0
1	357	20.8	67.0	33	35	19.1	23.0	63.0	78.9	13	21.7	71.7
2	217	12.6	79.6	17	17	9.8	11.2	72.8	90.1	6	10.0	81.7
3	159	9.3	88.9	20	6	11.6	3.9	84.4	94.1	5	8.3	90.0
4	88	5.1	94.0	13	8	7.5	5.3	91.9	99.3	5	8.3	98.3
5	42	2.4	96.4	9	1	5.2	.7	97.1	100.0	0	0	98.3
6	30	1.7	98.2	5	0	2.9	.0	100.0	100.0	1	1.7	100.0
7	17	1.0	99.2									
8	7	.4	99.6									
9	6	.3	99.9									
10	1	.1	100.0									

Wisconsin

Mean = 1.13
Mode = 0
S.D. = 1.73

Minnesota

	Physical	Behavioral
N =	173	152
Mean =	1.47	.82
Mode =	0	0

MSB

Mean = 1.11
Mode = 0
S.D. = 1.4

DIMENSIONS OF FUNCTIONAL LIMITATIONS

Data from each of the three field tests (with the exception of the one from MSB) were subjected to factor analysis with the goal of identifying the primary dimensions of functional limitations. Because they are not scaled in the same way, the strength items could not be included.

The data collection and analysis for each of these studies were completely separate, spanning a period of nearly five years, yet the results were remarkably congruent. The Minnesota and Wisconsin studies used principal factoring without iteration. Varimax orthogonal rotation was used to maximize the independence of the factors. Only components with eigen values of 1.0 or greater were retained for the final rotated solutions.

Three separate factor analyses were carried out with the Minnesota data: one each for the physical and behavioral disability subgroups (as defined above), and one on the total sample. Since there was no significant difference between the subgroups, only the findings from the Minnesota total sample will be reported. The factor analysis on the total sample produced five major factors and three single-item factors, or singlets, as shown in Table 6 (Crewe & Athelstan, 1981). The results from the Wisconsin study are shown in Table 7.

The Wisconsin findings were different from the Minnesota results in the following ways: (1) Speech and Language Functioning separated from the Cognitive Function factor and joined with Hearing to form a Communications factor; (2) Mobility loaded slightly higher on the Medical Condition factor than on Motor Functioning; (3) Work Habits shifted from the Vocational Qualifications factor to Personality and Behavior; and (4) Economic Disincentives joined the Vocational Qualifications factor. As shown in Table 15, the resulting structure consists of six factors and one singlet. Every functional limitations item on the inventory was included in a factor.

Another factor analysis was produced by Abt Associates in the MIS Pretest. They used a principal factoring method with iteration and the same rotational technique and criterion as we did on the Minnesota and Wisconsin data. In addition to carrying out an analysis for the entire sample, Abt tested the hypothesis that the essential factor structure would remain constant across disability groups. They conducted separate principal factor analyses with varimax rotation for the hearing impaired, orthopedic/amputation, and combined mentally ill, developmentally disabled, and chemically dependent disability types. The hypothesis was confirmed.

As shown in Table 8, Abt identified five factors accounting for 92% of the variance. The most significant difference between this analysis and the Wisconsin analysis is that the Vocational Qualification factor and the Vision singlet did not meet the criterion for identification as factors. Other comparisons are as follows:

(1) Abt's "Adaptation" factor is essentially the same as our "Personality and Behavior" factor except that it did not include the item, Social Support System.

Table 6

Item Composition of the Scales Identified in the Factor Analysis of the Minnesota Sample; Factor Loading of Each Item; and Coefficient of Internal Consistency Alpha for Each Scale

Factor	Alpha Value	Item	Loading
Cognitive Function	0.85	Learning Ability	0.78
		Memory	0.76
		Literacy	0.76
		Language Functioning	0.72
		Perceptual Organization	0.64
		Speech	0.63
Motor Function	0.81	Upper Extremity Functioning	0.82
		Hand Functioning	0.78
		Coordination	0.76
		Ambulation or Mobility	0.64
		Motor Speed	0.60
Personality & Behavior	0.81	Consistency of Behavior with Rehabilitation Goals	0.84
		Social Support System	0.72
		Accurate Perception of Disability	0.63
		Judgment	0.56
		Persistence	0.46
		Effective Interaction with People	0.44
Vocational Qualifications	0.73	Acceptability to Employers	0.73
		Work History	0.68
		Access to Job Opportunities	0.48
		Skills	0.46
		Personal Attractiveness	0.45
		Work Habits	0.40
Medical Condition	0.70	Endurance	0.79
		Absence from Work Due to Treatment or Medical Problems	0.76
		Stability of Condition	0.58
		Capacity for Exertion	0.57
Vision	_*	Vision	0.79
Economic Disincentives	_*	Economic Disincentives	0.71
Hearing	_*	Hearing	0.81

*Since these are single-item factors, Alpha does not apply.

Table 7

FAI Factors and Item Loadings - Wisconsin Sample

Factor Name	Item	Factor Loading	Item Descriptor	Variance	Reliability
1. Adaptive	20	.823	Congruence of Behavior	.200	.868
Behavior	18	.797	Judgment		
(formerly	19	.777	Persistence		
Personality	21	.700	Accurate Perception		
& Behavior)	22	.672	Effective Interaction		
	26	.632	Work Habits		
Eigen Value = 6.01	23	.586	Social Support System		
2. Motor	5	.852	Hand Function	.145	.832
Functioning	6	.827	Coordination		
Eigen Value =	4	.803	Upper Extremity Function		
4.35	7	.680	Motor Speed		
3. Cognition	12	.827	Learning Ability	.092	.802
(formerly	16	.755	Ability to Read & Write		
Cognitive	14	.743	Memory		
Functioning)	13	.722	Perceptual Organization		
Eigen Value = 2.77					
4. Physical	9	.785	Endurance	.056	.755
Condition	10	.683	Worktime Loss		
(formerly	8	.672	Capacity for Exertion		
Medical	11	.610	Stability of Condition		
Condition)	3	.467	Mobility		
Eigen Value = 1.69					
5. Communication	17	.872	Speech	.050	.835
Eigen Value =	2	.837	Hearing		
1.49	15	.831	Language		
6. Vocational	28	.654	Acceptability to Employers	.038	.648
Qualifications	29	.629	Access to Job Opportunities		
	27	.531	Work History		
Eigen Value =	30	.476	Economic Disincentives		
1.14	24	.449	Personal Attractiveness		
	25	.428	Skills		
7. Vision	1	.923	Vision	.034	NA
Eigen Value = 1.03					

Table 8

FAI Factors and Item Loadings from the MIS Pretest Samples

Factor Name	Item	Factor Loading	Item Descriptor	Variance
1. Adaptation	FAI 20	.788	Behavior Congruence	.325
	FAI 19	.761	Persistence	
Eigen Value = 5.33	FAI 18	.729	Judgment	
	FAI 21	.621	Accurate Perception	
	FAI 22	.574	Effective Interaction	
	FAI 26	.571	Work Habits	
2. Physical Condition	FAI 9	.769	Endurance	.281
	FAI 10	.664	Worktime Loss	
	FAI 11	.556	Stability of Condition	
Eigen Value = 4.62	FAI 3	.523	Mobility	
3. Communication	FAI 17	.924	Speech	.167
	FAI 15	.910	Language	
Eigen Value = 2.74	FAI 2	.890	Hearing	
4. Motor Functioning	FAI 5	.809	Hand Function	.078
	FAI 4	.777	Upper Extremity Function	
	FAI 6	.777	Coordination	
Eigen Value = 1.28	FAI 7	.590	Motor Speed	
5. Cognition	FAI 12	.788	Learning Ability	.066
	FAI 14	.589	Memory	
Eigen Value = 1.09	FAI 16	.546	Literacy	
	FAI 13	.523	Perceptual Organization	

(2) Abt's "Physical Condition" factor is identical to our "Medical Condition" factor except that it omitted the item, "Capacity for Exertion."

(3) Abt's factor, "Cognition" is identical to the one we had labeled "Cognitive Function," and "Motor Functioning" and "Communication" are identical to our factors bearing the same names.

Considering the minor realignment of items and new labels suggested by Abt, we have decided to alter the names of some of our factors. "Adaptive Behavior" seems to be a better descriptor than the old "Personality and Behavior," "Cognition" is simpler than "Cognitive Function," and "Physical

Condition" seems preferable to "Medical Condition." In our view, Table 7 provides the most complete and satisfactory view of the dimensions of the FAI.

Scores on the separate factors were obtained by adding the numerical values of the rating on each item within a factor. Table 9 displays the frequency distributions of the total scores on the factor scales for the Wisconsin sample. The range of scores varies according to the number of items in the factor. Mean scores for each factor are also shown.

Figure 1, a profile sheet displaying the percentile rank of the factor scores, could be used to plot the scores for a client, showing the relative intensity of problems in various areas.

CONCURRENT VALIDITY

Two lines of inquiry are described in this section. The first involves the existence of logical relationships between functional limitations scales and primary medical diagnosis. The other concerns the relationship between the FAI scores and the judgment of counselors with respect to their clients' severity of disability and prospects for employment.

Table 10 shows the mean and standard deviation of factor scale scores for eight disability groups in the Minnesota field test. Because of the small numbers in some of the cells, formal tests of insignificance were not calculated. However, perusal of the figures shows reasonable differences in scores between the groups. For example, the clients with orthopedical diagnoses score highest on the Motor Functioning factor while those diagnosed as mentally retarded or psychiatrically disabled were highest on the Personality and Behavior factor.

Orthopedic and Psychiatric diagnostic groups were selected for comparison because they seemed likely to provide the clearest differences in their typical patterns of functional limitations. Table 11 shows the mean scores of the two groups on each of the FL items as well as on the Total FL score and the Total Strength score. Significant differences are noted on about half of the items, virtually all in the expected direction. Table 12 shows the mean scores of the two groups on transformed factor scores. Significant differences were found on four of the eight with the Orthopedic group being rated as more impaired on Motor Function and Medical Condition and the Psychiatric group being more impaired on Personality and Behavior and Vocational Qualifications.

Abt Associates carried out a more extensive examination of the relationship between functional assessment and disability type. The results are quoted below:

> "Eight major disability groups were formed from the R-300 disability codes (taken from DVR records). One-way analyses of variance were computed using each of the five factors as dependent, and the eight disability categories as independent variables. Table 13 presents the mean factor scores by disability group.

Table 9

Frequency Distributions of Total Scores on Functional Limitations Factor Scales
Wisconsin Sample (N=1716)

Score	Adaptive Behavior		Motor Functioning		Cognition		Physical Condition		Communication		Vocational Qualification		Vision	
	N	Cum %	N	Cum %	N	Cum %	N	Cum %	N	Cum %	N	Cum %	N	Cum %
0	575	33.6	1128	65.8	1035	60.3	386	22.6	1404	81.9	152	8.9	1557	90.8
1	228	46.9	208	77.9	178	70.7	337	42.3	134	89.7	187	19.8	87	95.9
2	174	57.0	140	86.1	124	78.0	268	58.0	83	94.6	283	36.4	47	98.6
3	149	65.7	82	90.8	112	84.5	199	69.7	37	96.7	275	52.5	24	100.0
4	118	72.6	70	94.9	85	89.4	153	78.6	22	98.0	262	67.9		
5	107	78.9	27	96.5	64	93.2	124	85.9	3	98.2	158	77.1		
6	82	83.7	20	97.7	45	95.8	85	90.9	9	98.7	148	85.8		
7	85	88.6	17	98.7	42	98.3	61	94.4	4	98.9	104	91.9		
8	48	91.4	10	99.2	14	99.1	41	96.8	8	99.4	48	94.7		
9	30	93.2	7	99.7	9	99.6	18	97.9	10	100.0	34	96.7		
10	35	95.2	2	99.8	5	99.9	10	98.5			19	97.8		
11	21	96.4	1	99.8	1	99.9	11	99.1			15	98.7		
12	13	97.2	3	100.0	1	100.0	6	99.5			10	99.2		
13	19	98.3					6	99.8			4	99.5		
14	8	98.8					3	100.0			5	99.8		
15	7	99.2									1	99.8		
16	7	99.6									2	99.9		
17	2	99.7									1	100.0		
18	4	99.9												
19	0	99.9												
20	1	100.0												
Missing	3		1		1		8		2		8		1	
Mean	3.04		.93		1.31		2.66		.44		3.74		.15	
S.D.	3.58		1.76		2.13		2.61		1.27		2.67		.51	

Figure 1

Percentile Ranks of Factor Scores - Wisconsin Sample (N=1716)

Percentile	Adaptive Behavior	Motor Functioning	Cognition	Physical Condition	Communi-cation	Vocational Qualification	Vision
100-	--17+	--10+	--10+	--13+	--10+	--14+	--3
	--14-16	--8-9	--8-9	--11-12	--6-8	--12-13	
	--12-13	--6-7	--7	--9-10	--4-5	--10-11	--2
	--11	--5	--6	--8	--3	--9	
	--10	--4		--7	--2	--8	--1
	--9		--5			--7	
90-	--8	--3	--4	--6			
	--7				--1		
	--6	--2	--3	--5		--6	
80-							
	--5						
		--1	--2	--4		--5	
70-	--4						
			--1	--3			
	--3					--4	
60-							
	--2						
50-				--2			
						--3	--0
	--1						
40-					--0		
		--0		--1			
30-			--0				
						--2	
20-							
	--0						
						--1	
10-				--0			
						--0	
0-							

Table 10
Factor Scale from Scores and Standard Deviations Grouped According to Disability
Minnesota Sample

Factor Scale		Disability Group							
		Hearing (N=7)	Orthopedic (N=101)	Other Diseases (N=34)	Epilepsy (N=16)	Cardiovascular (N=15)	Psychiatric (N=75)	Chemical Dependency (N=33)	Mental Retardation (N=44)
Cognitive	$\bar{X}$	.29	.23	.25	.53	.16	.33	.16	1.13
Functioning	S.D.	.36	.43	.44	.45	.47	.41	.26	.57
Motor	$\bar{X}$	.03	.64	.36	.29	.32	.22	.09	.33
Functioning	S.D.	.08	.57	.45	.32	.36	.32	.17	.32
Personality and	$\bar{X}$	.38	.38	.36	.72	.31	.97	.76	.98
Behavior	S.D.	.30	.48	.44	.54	.39	.57	.58	.44
Vocational	$\bar{X}$	.62	.73	.64	1.19	.61	1.04	.84	1.18
Qualifications	S.D.	.30	.51	.47	.59	.40	.46	.43	.66
Medical	$\bar{X}$	.25	.83	.94	.47	1.28	.61	.44	.27
Condition	S.D.	.29	.56	.57	.29	.46	.48	.36	.31
Vision	$\bar{X}$	0	.08	.18	0	.07	.07	.06	.18
	S.D.	0	.31	.39	0	.26	.30	.24	.39
Economic	$\bar{X}$	0	.45	.18	.19	.93	.40	.24	.43
Disincentives	S.D.	0	.76	.46	.54	1.22	.70	.50	.70
Hearing	$\bar{X}$	1.57	.02	.12	.06	0	.03	0	.04
	S.D.	.79	.14	.33	.25	0	.16	0	.21

*Each factor score has been divided by the number of items in its respective factor, so that scores can range from 0 to 3.

Table 11

Comparison of Minnesota Subjects with Orthopedic (N = 101) and Psychiatric (N = 75) Diagnoses on FL Item Mean Scores

Item #	Name	Mean Score Ortho	Mean Score Psych	Significance t	Significance p*
1	Vision	.079	.067	.27	ns
2	Hearing	.020	.027	- .30	ns
3	Mobility	.762	.120	7.05	.001
4	Upper Extremity Functioning	.634	.067	5.86	.001
5	Hand Functioning	.495	.160	3.83	.001
6	Coordination	.505	.173	3.59	.001
7	Motor Speed	.802	.573	1.83	n s
8	Capacity for Exertion	1.347	.507	8.25	.001
9	Endurance	.822	.373	.384	.001
10	Loss of Time from Work	.346	.453	- .91	ns
11	Stability of Condition	.812	1.107	-2.49	.05
12	Learning Ability	.436	.827	-3.02	.01
13	Perceptual Organization	.149	.280	-1.90	ns
14	Memory	.129	.347	-2.83	.01
15	Language Functioning	.089	.067	.47	ns
16	Ability to Read and Write	.376	.347	.25	ns
17	Speech	.178	.093	1.24	ns
18	Judgment	.376	1.133	-7.22	.001
19	Persistence	.188	.707	-5.57	.001
20	Congruence of Behavior w/Reh.	.250	.813	-5.11	.001
21	Accurate Perception of Caps.	.594	1.013	-3.54	.001
22	Effective Interaction w/People	.360	1.333	-8.15	.001
23	Social Support System	.366	.773	-3.62	.001
24	Personal Attractiveness	.356	.360	- .04	ns
25	Skills	1.248	1.320	- .54	ns
26	Work Habits	.327	1.040	-6.02	.001
27	Work History	.505	1.400	-6.98	.001
28	Acceptability to Employers	1.000	1.493	-3.82	.001
29	Access to Job Opportunities	.921	.627	2.46	.05
30	Economic Disincentives	.446	.400	.41	ns
	Total FL Score	14.78	18.00	-2.23	.05
	Total Strength Score	1.43	.73	3.10	.01

*Two tailed

Table 12

Comparison of Transformed Factor Scores* for Minnesota Clients with Orthopedic Diagnosis (N = 101) and Those with Psychiatric Diagnoses (N = 75)

Factor	Mean Score		Significance	
	Ortho	Psych	t	p**
Cognitive Function	.226	.327	-1.58	ns
Motor Function	.640	.219	5.72	.001
Personality & Behavior	.345	.973	-8.35	.001
Vocational Qualifications	.806	1.040	-3.07	.01
Medical Condition	.834	.610	2.80	.01
Vision	.079	.067	.27	ns
Economic Disincentives	.257	.200	.92	ns
Hearing	.020	.027	- .30	ns

*Total factor score divided by the number of items in the factor

**Two tailed

Table 13 (3.7 from Turner, 1980)

Factor Score Means by Disability Type

	N	Adaptation	Physical Condition	Communication	Motor Functioning	Cognition
Blind	96	-.059	.045	-.282	-.079	.070
Hearing Impaired	246	-.099	-.288	1.528	-.225	-.08
Orthopedic	357	-.359	.632	-.283	.501	-.241
Amputation	33	-.454	-.017	-.368	.554	-.370
Mentally Ill	215	.653	-.117	-.435	-.264	-.139
Developmental Disability	125	.304	-.559	-.320	-.036	1.376
Chemical Dependent	190	.090	-.356	-.489	-.300	-.340
Organic	47	-.390	.101	-.345	-.252	.693

Newman-Kuels post hoc comparison technique was employed for all significant effects."

"The results revealed a significant effect for adaptation (F (7,1301) = 3.06, p .001). Post hoc analysis indicated that the Mental Illness group was significantly more impaired than the other group. For the Physical Condition factor, the significant effect (F (7,1301) = 51.91, p .001) was attributed to the Orthopedic group's high level of impairment and to the significantly lower factor scores of the Developmental Disability group. Post Hoc analysis of the significant effect for the Communication factor (F (7,1301) = 102.77, p .001) revealed that the Hearing Impaired group was more impaired than any other disability type. For the Motor Functioning factor, the significant effect (F (7,1301) = 31.22, p .001) was found to be due to significantly higher disability in the Orthopedic and Amputation groups. And finally, the Cognitive factor was found to have a significant effect (F (7,1301) = 84.75, p .001). The Developmental Disabled group was significantly more impaired than any of the other groups. As well, the Organic and Blind group, while not different from each other, were more impaired than the other groups."

"These results clearly show a strong association between functionally assessed disability and the general disability code classification. The average eta for these results is .29, indicating that nearly 30% of the variance in this very large sample is attributable to the factor scores" (Turner, 1982, p. 39-41).

Expert judgment was the other basis for evaluating the concurrent validity of the FAI. The authors reasoned that experienced counselors were in the best position to rate the severity of a client's disability and to predict his or her prospects for getting and holding a job. Therefore, two Likert-type ratings, shown below, were added to the FAI.

Counselor Assessment of Severity of Disability (Circle one number.)

1	2	3	4	5	6	7
minimally disabled		moderately disabled		severely disabled		very severely disabled

Counselor Prediction of Employability (i.e., probability of employment)
(Circle one number.)

1	2	3	4
poor (0-25% chance)	fair (26-50% chance)	good (51-75% chance)	excellent (76-100% chance)

Unlike the FL items, these ratings are not behaviorally anchored. During training, counselors were instructed to put the rest of the functional assessment process out of mind as much as possible, and simply give an intuitive response to these questions. Of course, coming as they do at the end of the FAI, they will inevitably be affected to some extent by the process.

Yet, counselors have been making such judgments far longer than they have been using this inventory, and if the FAI were actually irrelevant to the dimensions, presumably only a weak correlation would follow from their proximity.

This distribution of the counselor ratings of severity of disability from the three samples are shown on Table 14. The Wisconsin sample scores approached a normal distribution with a mode of 3 and a mean of 3.82. The mode and mean for the Minnesota samples (both the physically and behaviorally disabled) are very similar. The group from MSB is rated as slightly higher in severity than the DVR clients. This is consonant with their slightly higher mean on total FL score.

Table 15 contains the distribution of scores for the three samples on the counselor prediction of employability item. With a mean of 3.08 for the Physically disabled subgroup and 2.89 for the Behaviorally disabled subgroup, the ratings were most optimistic for the Minnesota sample. The MSB ratings were lowest with a mean of 2.48, and Wisconsin was in between with a mean of 2.78.

Table 16 shows the relationship between these two kinds of counselor ratings and other client characteristics for the Minnesota sample. No significant difference was found between the Physical and Behavioral subgroups on the ratings of severity of disability or employability. In addition, few significant differences were found between ratings for the two sexes. The only significant difference between males and females was found for the clients with behavioral diagnoses. Counselors rated a larger proportion of the females as having excellent prospects and more males as having fair prospects. Similar proportions of the scores of the two sexes were assigned to the remaining categories (i.e., very good and poor). On the other hand, significant relationships were found between age and both ratings for the Physical as well as the Behavioral subgroups. Older clients were rated as more severely disabled whereas younger clients were rated as having better prospects for getting and holding a job.

The data from both the Wisconsin and Minnesota studies supported the hypothesis that individuals who are perceived as severely disabled will have high scores on functional limitations items and low scores on the strength items. They also indicated that people who were rated as highly employable tend to receive low scores on the limitations items and higher tallies on the strengths. As shown in Table 17, every one of the FL items was significantly correlated with the Severity rating for the Wisconsin sample. Twenty-nine of the 30 were also correlated with the Prediction of Employability. The correlation between Total FL and Severity was .549 and with Employability it was -.567. The relationships between the strength items and the counselor ratings were much weaker although all of the strength items were significantly correlated with Prediction of Employability. Except for Motivation and Pleasing Personality, the correlations with Severity were not statistically significant.

In general, the correlation between the FAI items and counselor ratings were slightly higher for the Minnesota sample. Those data are displayed for the Physical and Behavioral subgroups in Tables 18 and 19. Although some differences can be seen for individual items, the correlation between Total FL and the Severity rating are almost identical for the two subgroups (r = .596 for the Physically disabled and .60 for the Behaviorally disabled.) Correlations of similar magnitude were found between limitations and the rating of Employability, but with the opposite sign.

The correlations between the strength items and counselor ratings are also displayed in Tables 18 and 19. The correlations were highest between strengths and Prediction of Employability for both the Physically and Behaviorally disabled subgroups. Statistically significant relationships were also found between most of the items and the Severity rating for the Physically disabled clients. Finally, total strength score was significantly correlated with both counselor ratings for both subgroups.

Table 20 shows the results of a Stepwise Multiple Regression to the counselor ratings for the Minnesota sample. Total FL score was the strongest variable in both equations. Eight additional variables were included in the final prediction of Severity of disability. The multiple r equalled .74, accounting for 54% of the variance. After Total FL, Total Strengths and age were the strongest variables in the Employability equation, followed by five individual items. The resulting multiple r was .78, accounting for 61% of the variance.

Table 14

Counselor Ratings of Severity of Disability for Wisconsin DVR (N=1716), Minnesota DVR (N=351) and Minneapolis Society for the Blind (N=60) Samples

	Wisconsin			Minnesota						MSB		
				F		%		Cum. %				
	F	%	Cum. %	Phy	Beh	Phy	Beh	Phy	Beh	F	%	Cum. %
1 - Minimally disabled	72	4.5	4.5	4	1	2.4	.7	2.4	.7	0	0	0
2	204	12.8	17.3	18	12	10.7	8.0	13.1	8.7	3	5.2	5.2
3 - Moderately disabled	428	26.9	44.2	57	48	33.7	32.0	46.8	40.7	12	20.7	25.9
4	317	19.9	64.1	28	25	16.6	16.7	63.4	57.4	18	31.0	56.9
5 - Severely disabled	415	26.0	90.1	36	47	21.3	31.3	84.7	88.7	14	24.1	81.0
6	117	7.3	97.4	19	13	11.2	8.7	95.9	97.4	11	19.0	100.0
7 - Very severely disabled	41	2.6	100.0	7	4	4.1	2.7	100.0	100.0	0	0	100.0
Missing	122			4	2					2		

Wisconsin

Mean = 3.82
Mode = 3
S.D. = 1.39

Minnesota

	Phy	Beh
N =	173	152
Mean =	3.95	4.07
Mode =	3	3

MSB

Mean = 4.31
Mode = 4
S.D. = 1.16

Table 15

Counselor Prediction of Employability for Wisconsin DVR (N=1716), Minnesota DVR (N=351) and Minneapolis Society for the Blind (N=60) Samples

	Wisconsin			Minnesota						MSB		
				F		%		Cum. %				
	F	%	Cum. %	Phy	Beh	Phy	Beh	Phy	Beh	F	%	Cum. %
1 - Poor vocational potential	126	7.9	7.9	8	9	4.8	6.0	4.8	6.0	13	22.4	22.4
2 - Fair vocational potential	428	26.8	34.7	37	38	22.0	25.3	26.8	31.3	18	31.0	53.4
3 - Good vocational potential	693	43.4	78.1	56	64	33.3	42.7	60.1	74.0	13	22.4	75.9
4 - Excellent vocational potential	349	21.9	100.0	67	39	39.9	26.0	100.0	100.0	14	24.1	100.0
Missing	120			5	2					2		

Wisconsin

N = 1596
Mean = 2.78
Mode = 3
S.D. = .87

Minnesota

	Phy	Beh
N =	168	150
Mean =	3.08	2.89
Mode =	3	3

MSB

Mean = 2.48
Mode = 2
S.D. = 1.10

Table 16

Relationships Between Counselor Ratings (of Severity and Employability) and Demographic Variables for Minnesota Clients with Physical or Behavioral Primary Diagnosis

	Physical Diagnosis		Behavioral Diagnosis	
	Statistic	P	Statistic	P
Counselor Judgment of Severity of Disability				
Sex	X2 = 3.54	n.s.	X2 = 7.77	n.s.
Age	r = .293	.001*	r = .363	.001*
Counselor Prediction of Employability				
Sex	X2 = .629	n.s.	X2 = 10.89	.05
Age	r = .43	.001**	r = .26	.001**

*Younger clients rated as less severely disabled

**Younger clients rated as having better prospects for employment

Table 17

Correlations Between Functional Assessment Items and Counselor Ratings of Severity of Disability and Employability Wisconsin Sample (N=1716)

Item		Rating of Severity		Rating of Employability	
#	Name	r	p	r	p
1	Vision	.147	.001	-.061	.01
2	Hearing	.095	.001	.039	n.s.
3	Mobility	.286	.001	-.151	.001
4	Upper Extremity Functioning	.156	.001	-.105	.001
5	Hand Functioning	.163	.001	-.152	.001
6	Coordination	.227	.001	-.193	.001
7	Motor Speed	.320	.001	-.229	.001
8	Capacity for Exertion	.194	.001	-.117	.001
9	Endurance	.295	.001	-.276	.001
10	Loss of Time from Work	.305	.001	-.309	.001
11	Stability of Condition	.259	.001	-.176	.001
12	Learning Ability	.215	.001	-.270	.001
13	Perceptual Organization	.172	.001	-.244	.001
14	Memory	.143	.001	-.202	.001
15	Language Functioning	.171	.001	-.101	.001
16	Ability to Read and Write	.116	.001	-.162	.001
17	Speech	.196	.001	-.076	.001
18	Judgment	.236	.001	-.292	.001
19	Persistence	.217	.001	-.311	.001
20	Congruence of Behavior w/Goals	.249	.001	-.300	.001
21	Accurate Perception of Capabilities	.228	.001	-.323	.001
22	Effective Interaction w/People	.251	.001	-.319	.001
23	Social Support System	.151	.001	-.218	.001
24	Personal Attractiveness	.193	.001	-.228	.001
25	Skills	.251	.001	-.332	.001
26	Work Habits	.260	.001	-.384	.001
27	Work History	.227	.001	-.293	.001
28	Acceptability to Employers	.379	.001	-.360	.001
29	Access to Job Opportunities	.325	.001	-.336	.001
30	Economic Disincentives	.241	.001	-.289	.001
	Total FL Score	.549	.001	-.567	.001
31	Strength: Physical Appearance	-.022	n.s.	.126	.001
32	Strength: Personality	-.052	.05	.158	.001
33	Strength: Intelligence	-.036	n.s.	.176	.001
34	Strength: Vocational Skill	-.009	n.s.	.152	.001
35	Strength: Education	-.020	n.s.	.107	.001
36	Strength: Supportive Family	.002	n.s.	.100	.001
37	Strength: Sufficient Money	.018	n.s.	.047	.05
38	Strength: Motivation	-.111	.001	.279	.001
39	Strength: Job Available	-.030	n.s.	.167	.001
40	Strength: Initiative & Prb. Solv.	-.032	n.s.	.161	.001
	Total Strength Score	-.063	.01	.290	.001

Table 18

Correlations Between Functional Assessment Items and Counselor Ratings of Severity of Disability for Minnesota Clients with Physical (N=168) and Behavioral (N = 152) Primary Diagnoses

Item #	Name	Physical Diagnosis r	Physical Diagnosis p	Behavioral Diagnosis r	Behavioral Diagnosis p
1	Vision	.149	.05	.016	n.s.
2	Hearing	.022	n.s.	.090	n.s.
3	Mobility	.474	.001	.286	.001
4	Upper Extremity Functioning	.376	.001	.240	.01
5	Hand Functioning	.336	.001	.234	.01
6	Coordination	.358	.001	.162	.05
7	Motor Speed	.484	.001	.403	.001
8	Capacity for Exertion	.398	.001	.347	.001
9	Endurance	.403	.001	.372	.001
10	Loss of Time from Work	.312	.001	.268	.001
11	Stability of Condition	.264	.001	.221	.01
12	Learning Ability	.176	.05	.176	.05
13	Perceptual Organization	.150	.05	.254	.001
14	Memory	.275	.001	.364	.001
15	Language Functioning	.267	.001	.152	.05
16	Ability to Read and Write	.138	.001	.227	.01
17	Speech	.250	.001	.286	.001
18	Judgment	.208	.01	.367	.001
19	Persistence	.226	.01	.287	.001
20	Congruence of Behavior w/Goals	.097	n.s.	.165	.05
21	Accurate Perception of Capabilities	.219	.01	.351	.001
22	Effective Interaction w/People	.172	.05	.474	.001
23	Social Support System	.078	n.s.	.053	n.s.
24	Personal Attractiveness	.362	.001	.325	.001
25	Skills	.303	.001	.338	.001
26	Work Habits	.223	.01	.331	.001
27	Work History	.125	n.s.	.324	.001
28	Acceptability to Employers	.521	.001	.530	.001
29	Access to Job Opportunities	.382	.001	.203	.01
30	Economic Disincentives	.348	.001	.170	.05
	Total FL Score	.596	.001	.600	.001
31	Strength: Physical Appearance	-.204	.01	-.115	n.s.
32	Strength: Personality	-.131	.05	-.143	.05
33	Strength: Intelligence	-.194	.01	-.034	n.s.
34	Strength: Vocational Skill	-.136	.05	-.045	n.s.
35	Strength: Education	.016	n.s.	-.011	n.s.
36	Strength: Supportive Family	-.269	.001	-.126	n.s.
37	Strength: Sufficient Money	-.191	.01	-.179	.01
38	Strength: Motivation	-.167	.05	-.158	.05
39	Strength: Job Available	-.114	n.s.	-.047	n.s.
40	Strength: Initiative & Prb. Solv.	.094	n.s.	---	n.s.
	Total Strength Score	-.297	.001	-.190	.01

Table 19

Correlations Between Functional Assessment Items and Counselor Prediction of Employability for Minnesota Clients with Physical (N=168) and Behavioral (N = 152) Primary Diagnoses

Item #	Name	Physical Diagnosis r	Physical Diagnosis p	Behavioral Diagnosis r	Behavioral Diagnosis p
1	Vision	-.310	.001	.089	n.s.
2	Hearing	-.042	n.s.	-.171	.05
3	Mobility	-.310	.001	-.172	.05
4	Upper Extremity Functioning	-.215	.01	-.064	n.s.
5	Hand Functioning	-.202	.01	-.239	.01
6	Coordination	-.154	.01	-.121	n.s.
7	Motor Speed	-.325	.001	-.402	.001
8	Capacity for Exertion	-.359	.001	-.348	.001
9	Endurance	-.413	.001	-.393	.001
10	Loss of Time from Work	-.258	.001	-.309	.001
11	Stability of Condition	-.136	.05	-.083	n.s.
12	Learning Ability	-.336	.001	-.330	.001
13	Perceptual Organization	-.184	.01	-.244	.001
14	Memory	-.202	.01	-.391	.001
15	Language Functioning	-.136	.05	-.252	.001
16	Ability to Read and Write	-.300	.001	-.233	.001
17	Speech	-.303	.001	-.275	.001
18	Judgment	-.298	.001	-.363	.001
19	Persistence	-.235	.001	-.283	.001
20	Congruence of Behavior w/Goals	-.232	.001	-.275	.001
21	Accurate Perception of Capabilities	-.219	.01	-.397	.001
22	Effective Interaction w/People	-.295	.001	-.380	.001
23	Social Support System	-.295	.001	-.166	.05
24	Personal Attractiveness	-.298	.001	-.397	.001
25	Skills	-.333	.001	-.380	.001
26	Work Habits	-.339	.001	-.545	.001
27	Work History	-.239	.001	-.337	.001
28	Acceptability to Employers	-.397	.001	-.295	.001
29	Access to Job Opportunities	-.441	.001	-.231	.01
30	Economic Disincentives	-.365	.001	-.300	.001
	Total FL Score	-.600	.001	-.639	.001
31	Strength: Physical Appearance	.177	.05	.246	.001
32	Strength: Personality	.241	.001	.258	.001
33	Strength: Intelligence	.308	.001	.239	.001
34	Strength: Vocational Skill	.136	.05	.208	.01
35	Strength: Education	.049	n.s.	.082	n.s.
36	Strength: Supportive Family	.294	.001	.276	.001
37	Strength: Sufficient Money	.313	.001	.287	.001
38	Strength: Motivation	.512	.001	.435	.001
39	Strength: Job Available	.208	.01	.047	n.s.
40	Strength: Initiative & Prb. Solv.	.174	.05	----	n.s.
	Total Strength Score	.522	.001	.547	.001

Table 20

Stepwise Multiple Regression of Functional Limitations, Strengths, & Demographic Variables to Counselor Judgment of Severity of Disability and Counselor Prediction of Employability for the Minnesota Sample

Outcome Variable	Variables in Equation	Multiple r	r^2
Counselor Judgment of Severity of Disability	Step 1 - Total FL score	.586	.343
	Step 2 - FAI Item 12, Learning Ability	.642	.412
	Step 3 - Age	.665	.442
	Step 4 - FAI Item 3, Mobility	.679	.461
	Step 5 - FAI Item 28, Acceptability to Employers	.698	.488
	Step 6 - Factor Score #6, Vision	.714	.510
	Step 7 - Remove FAI Item 12, Learning Ability	.713	.508
	Step 8 - FAI Item 9, Endurance	.721	.520
	Step 9 - FAI Item 37, Strength: Sufficient Money	.726	.528
	Step 10 - FAI Item 1, Vision	.731	.535
	Step 11 - FAI Item 40, Strength: Other	.736	.542
Counselor Prediction of Employability	Step 1 - Total FL Score	.633	.401
	Step 2 - Total Strengths	.704	.495
	Step 3 - Age	.736	.541
	Step 4 - FAI Item 9, Endurance	.756	.571
	Step 5 - FAI Item 26, Work Habits	.768	.590
	Step 6 - FAI Item 31, Strength: Physical Appearance	.774	.599
	Step 7 - FAI Item 10, Loss of Time From Work	.778	.606
	Step 8 - FAI Item 32, Strength: Pleasing Personality	.783	.613

CHANGE IN FUNCTIONAL LIMITATIONS

Because rehabilitation services are often provided with the goal of relieving functional limitations (for example, purchase of a hearing aid or provision of a reading tutor), interest grew in using functional assessment to measure client change. The authors were concerned that such a purpose might be inappropriate for the FAI, an instrument designed to describe the full range of client problems. Some impairments might, indeed, be relieved through rehabilitation services, but others might be permanent. In the latter cases, the counselor would not try to fix them but only make sure they did not interfere with the vocational plan that was developed. Any implication that all functional limitations should be remediated would be both unrealistic and overly burdensome to the rehabilitation enterprise.

As a partial solution, a column was added to the answer sheet, allowing the counselor to check off any functional limitations that might be modifiable and which would be addressed by the services provided. This column was not on the answer sheet at the time of the Minnesota field test, the only one for which closure data are currently available. Questions about the relationship between functional change and rehabilitation outcomes will need to await future research. Table 21 reports on the frequency with which FL items were identified as being potentially changeable in the Wisconsin sample. These proportions may underestimate the actual number of clients for whom changes are anticipated because many counselors appeared not to use the check-off system at all. Perhaps they were unwilling to make such a commitment, or it may be that this step was viewed as an ancillary process, not really part of the functional assessment. In any case, Table 21 conveys information about the relative frequency with which counselors expect to see client change as a result of their services. By a wide margin they are most likely to predict improvement in skills. Other relatively frequent checkmarks were found next to work habits, work history, judgment, and accurate perception of capabilities and limitations.

Table 22 shows both the percentage of clients for whom some impairment was noted on each functional limitations item and the proportion for whom improvement was predicted for the Wisconsin and MSB samples. Changes were much more frequently predicted by the MSB counselors. Adjusting for the differences in base rates, both groups were relatively likely to predict changes in the areas included in the Vocational Qualifications and Adaptive Behavior factors. In addition, MSB clients were often expected to improve in Mobility and less frequently in Capacity for Exertion, Perceptual Organization and Endurance.

PREDICTIVE VALIDITY

The question of whether functional limitations and capacities are consistently related to rehabilitation outcomes is a critical one. Rephrased in statistical terms, it concerns the predictive validity of the FAI. For the Minnesota sample, scores on individual items, factor scales, and Total FL and Strength scores have been correlated with several outcome measures.

Between two and one-half and three years after the FAI ratings had been made 255 of the original 351 clients had their cases closed by DVR.

Table 21

Frequency of Predicted Improvement in Functional Limitations
Wisconsin Sample (N = 1716)

Item #	Name	Change Predicted N	 %
1	Vision	8	.5
2	Hearing	5	.3
3	Mobility	15	.9
4	Upper Extremity Functioning	5	.3
5	Hand Functioning	7	.4
6	Coordination	7	.4
7	Motor Speed	19	1.1
8	Capacity for Exertion	38	2.2
9	Endurance	36	2.1
10	Loss of Time from Work	25	1.5
11	Stability of Condition	59	3.4
12	Learning Ability	41	2.4
13	Perceptual Organization	18	1.0
14	Memory	14	.8
15	Language Functioning	7	.4
16	Ability to Read and Write	29	1.7
17	Speech	15	.9
18	Judgment	100	5.8
19	Persistence	77	4.5
20	Congruence of Behav. w/Rehab.	69	4.0
21	Accurate Percept. of Capabilities	100	5.8
22	Effective Interaction w/People	71	4.1
23	Social Support System	31	1.8
24	Personal Attractiveness	31	1.8
25	Skills	192	11.2
26	Work Habits	110	6.4
27	Work History	108	6.3
28	Acceptability to Employers	81	4.7
29	Access to Job Opportunities	83	4.8
30	Economic Disincentives	22	1.3

Table 22

Frequency of Noted Impairment Compared with Predicted Improvement on FL items for Wisconsin (N = 1716) and Minneapolis Society for the Blind (N = 60) Samples

FAI Item		Wisconsin DVR				Minneapolis Society for the Blind			
		Some Impairment		Improvement Predicted		Some Impairment		Improvement Predicted	
#	Name	N	%	N	%	N	%	N	%
1	Vision	158	9.2	8	.5	60	100.0	0	.0
2	Hearing	111	6.5	5	.3	6	10.0	1	1.7
3	Mobility	485	28.3	15	.9	40	66.7	19	31.7
4	Upper Extremity	223	13.0	5	.3	4	6.6	0	0
5	Hand Functioning	252	14.7	7	.4	14	23.3	2	3.3
6	Coordination	310	18.1	7	.4	9	15.0	2	3.3
7	Motor Speed	461	26.9	19	1.1	12	20.0	2	3.3
8	Capacity for Exertion	821	48.0	38	2.2	39	65.0	6	10.0
9	Endurance	533	31.1	36	2.1	24	40.0	4	6.7
10	Loss of Time from Work	465	27.1	25	1.5	38	63.3	3	5.0
11	Stability of Condition	1067	62.2	59	3.4	45	75.0	1	1.7
12	Learning Ability	546	31.9	41	2.4	12	20.0	2	3.3
13	Perceptual Organization	319	18.6	18	1.0	11	18.3	5	8.3
14	Memory	299	17.4	14	.8	8	13.3	2	3.3
15	Language	211	12.4	7	.4	2	3.3	0	0
16	Ability Read & Write	400	23.3	29	1.7	9	15.0	3	5.0
17	Speech	201	11.8	15	.9	6	10.0	1	1.7
18	Judgment	709	41.3	100	5.8	14	23.3	5	8.3
19	Persistence	540	31.5	77	4.5	10	16.7	4	6.7
20	Congruence of Behavior	486	28.3	69	4.0	7	11.7	4	6.7
21	Acc. Percept. of Caps.	649	37.8	100	5.8	24	40.0	20	33.3
22	Effective Interaction	595	34.7	71	4.1	8	13.3	7	11.7
23	Social Support System	531	31.1	31	1.8	14	23.3	1	1.7
24	Personal Attractiveness	288	16.8	31	1.8	8	13.3	3	5.0
25	Skills	1074	62.6	192	11.2	43	71.7	14	23.3
26	Work Habits	540	31.5	110	6.4	4	6.7	2	3.3
27	Work History	1080	63.0	108	6.3	38	63.3	0	0
28	Acceptab. to Employers	1077	62.9	81	4.7	59	98.3	2	3.3
29	Access to Job Opprs.	849	49.6	83	4.8	53	88.3	3	5.0
30	Economic Disincentives	319	18.6	22	1.3	29	48.3	2	3.3

Eighty-four subjects were reported to still be active in the system, and data were missing on 12. Four outcome measures were used as follows:

(1) Service Costs (divided for this sample into quartiles: Less than $150; $150-$849; $850-$1992; $1993 and up).

(2) Service Outcome (closed rehabilitated vs. still in the VR system vs. closed, not rehabilitated).

(3) Work Status at Closure (competitively employed vs. noncompetitively employed vs. not working).

(4) Earnings at Closure (less than $100 per week vs. $100 or more per week).

Table 23 shows the distributions of physically and behaviorally disabled clients on the variables. It shows that about two-thirds of the closed cases were successfully rehabilitated (i.e., status 26). The measure, "work status at closure" divides the clients somewhat differently. The Competitive category includes all who were in salaried jobs at competitive wages while the Noncompetitive one included sheltered workers, unpaid family workers and volunteer workers. Calculations on the variable, Closure Earnings include only those clients who were receiving some money.

Table 24 shows the results of Chi-square calculations between each FAI item and each of the outcome variables. For the FL items, clients who were rated as having some impairment (levels 1, 2 or 3) were placed in one group and those rated as having no impairment were placed in the other. For the Strength items, clients who were identified as having the characteristic were contrasted with those for whom it was not checked.

Distinctly different patterns of relationship emerged between the functional limitations items and the several dependent variables. Columns 3 and 4 focus on relationships with Service Costs. For 13 of the FL items, the presence of rated limitation was associated with higher service costs. None of those items was associated with physical or motor functioning. Rather, they came from the factors of Cognition, Communication, Adaptive Behavior, and Vocational Qualifications. In addition, significant Chi-squares were obtained for three of the strength items: clients who were perceived to have special assets with respect to personality, financial resources or motivation were unlikely to be among those in the highest service cost category. It seems likely that most of those in the highest cost categories were those sent to rehabilitation facilities for evaluation or work adjustment training.

Columns 5 and 6 show the results of analyses involving the variable, Service Outcome. Clients were divided into three categories: those closed as rehabilitated (status 26), those still in the VR system, and those closed as not rehabilitated. Because the "successful" category included both the sheltered and competitive workers, the patterns of significance are very complex. Only 13 of the 30 FL items showed a significant relationship, and in some cases people with greater limitations were more likely than others to be successful. The reason appears to be that people who are closed as noncompetitive workers have the most severe limitations of any clients, even more than those who are closed as not rehabilitated. Successful closure was related to the absence of impairment in the areas of endurance, loss of time from work, and stability of condition, but also to the presence of limitations in the areas of speech, learning ability, and effective interaction with people. Those who were closed as not rehabilitated were more likely than those who were successful to have impairments of mobility, accurate perception of capabilities and limitations, persistence, social support system, and economic disincentives. People who were still in the rehabilitation system presented yet a different pattern of characteristics. They were more likely than those who had been rehabilitated to have impairments of mobility, capacity for exertion, and stability of condition, but they were unlikely to have difficulties with learning, persistence, accurate perception of capabilities and limitations, loss of time from work, work habits, or social support system. In addition, they were most likely to have the strengths of exceptional intelligence, family support, financial resources, and motivation. It would not be surprising to find that a substantial proportion of the people still in the system were enrolled in long term training programs.

Work Status at Closure is presented on Table 24, columns 7 and 8. Those still in the system were eliminated from these calculations, and people in competitive work were separated from those who were not. Twenty-one of the 30 FL scales and 4 of the strength items were significantly related to this variable. In general, people in competitive work are much less likely to have limitations while those in noncompetitive work are the most likely, with those not working at all in between. Specifically, the noncompetitive workers were most likely to have impairments of speech, hand function, coordination, motor speed, learning ability, judgment, persistence, perceptual organization, memory, language functioning, ability to read and write, effective interaction with people, personal attractiveness, work habits, work history, and economic disincentives. The only area in which they were less likely than the others to be limited was stability of condition. Those who were not working were most likely to have mobility impairments, and they were also more likely than the competitive workers to have judgment problems. There were no areas in which the competitive workers were judged to be more often impaired, but they were more likely to have the strengths of exceptionally attractive physical appearance, intelligence, skill, and family support.

Columns 9 and 10 examine the relationships between items and Earnings at Closure. These analyses included only the 167 individuals who were reported as having some earnings, but the results have much in common with those in the previous table. Nineteen of the Chi-squares for the FL items were statistically significant, in a consistent pattern of people with impairments falling in the low income group and those without in the high income category. Only one strength item was significant, and that also favored the high earnings group.

Table 25 summarizes the correlations between the Total FL and Total Strengths scores and the outcome variables. Consistent with the foregoing discussion, these measures were not significantly related to Service Outcome, but they were related to the other variables. The FL scores were more strongly predictive than were the strengths. Greater limitations were correlated with higher service costs, noncompetitive or no work, and low earnings. The presence of strengths followed an inverse pattern.

Table 23

Comparison of Minnesota Subjects with Physical and Behavioral Disabilities on Outcome Measures

	N		Percentage		Cumulative Percentage	
Outcome Measure	Phys.	Beh.	Phys.	Beh.	Phys.	Beh.
Service Cost						
Less than $150	38	26	35.2	19.8	35.2	19.8
$150 - $849	32	22	29.6	16.8	64.8	36.6
$850 - $1992	20	38	18.5	29.0	83.3	65.6
Over $1992	18	45	16.7	34.4	100.0	100.0
Missing Data	7	9				
Service Outcome						
Closed, Rehab'd.	76	94	43.9	61.8	43.9	61.8
Still in VR System	58	12	33.5	7.9	77.4	69.7
Closed, Not Rehab'd.	39	46	22.5	30.3	100.0	100.0
Work Status at Closure						
Competitive	60	64	56.6	51.2	56.6	51.2
Non-competitive	17	37	16.0	29.6	72.6	80.8
Not Working	29	24	27.4	19.2	100.0	100.0
Missing Data	9	15				
Closure Earnings						
Less than $100/week	21	43	29.2	45.3	29.2	45.3
$100/week or more	51	52	70.8	54.7	100.0	100.0
Missing Data or Not Earning Any Money	43	45				

Table 24

Relationship Between Functional Assessment Items and Four Outcome Variables for Minnesota Sample

Item		Service Costs		Service Outcomes		Work Status		Earnings at Closure	
#	Name	X^2	P	X^2	P	X^2	P	X^2	P
1	Vision	2.17	n.s.	4.11	n.s.	1.73	n.s.	1.50	n.s.
2	Hearing	2.46	n.s.	.13	n.s.	.90	n.s.	.00	n.s.
3	Mobility	4.15	n.s.	8.67	.05	8.95	.05	.00	n.s.
4	Upper Extremity Functioning	4.06	n.s.	.22	n.s.	.54	n.s.	.02	n.s.
5	Hand Functioning	7.34	n.s.	1.43	n.s.	12.63	.01	7.29	.01
6	Coordination	.73	n.s.	.16	n.s.	9.55	.01	4.15	.05
7	Motor Speed	4.16	n.s.	1.76	n.s.	19.88	.001	16.67	.001
8	Capacity for Exertion	.95	n.s.	14.16	.001	8.03	.05	9.10	.01
9	Endurance	5.43	n.s.	10.44	.01	6.10	.05	5.59	.05
10	Loss of Time from Work	3.86	n.s.	8.77	.05	2.98	n.s.	1.24	n.s.
11	Stability of Condition	2.50	n.s.	7.79	.05	11.77	.01	.42	n.s.
12	Learning Ability	35.70	.001	6.28	.05	28.93	.001	12.10	.001
13	Perceptual Organization	27.23	.001	3.66	n.s.	17.31	.001	11.55	.001
14	Memory	10.16	.05	3.94	n.s.	15.98	.001	14.05	.001
15	Language Functioning	11.81	.01	5.71	n.s.	41.76	.001	15.51	.001
16	Ability to Read and Write	14.87	.01	4.42	n.s.	38.71	.001	19.69	.001
17	Speech	12.29	.01	6.82	.05	45.94	.001	29.07	.001
18	Judgment	14.33	.01	4.51	n.s.	8.43	.05	3.12	n.s.
19	Persistence	11.08	.05	6.24	.05	14.42	.001	5.24	.05
20	Congruence of Behavior w/Goals	6.90	n.s.	2.74	n.s.	2.08	n.s.	.00	n.s.
21	Accurate Perception of Capabilities	7.64	n.s.	8.05	.05	5.63	n.s.	.70	n.s.
22	Effective Interaction w/People	25.04	.001	7.14	.05	12.57	.01	10.78	.001
23	Social Support System	11.59	.01	14.11	.001	2.37	n.s.	.35	n.s.
24	Personal Attractiveness	18.89	.001	1.56	n.s.	17.17	.001	8.76	.01
25	Skills	2.47	n.s.	3.00	n.s.	9.13	.05	3.21	n.s.
26	Work Habits	33.00	.001	6.37	.05	33.22	.001	26.75	.001
27	Work History	18.35	.001	.39	n.s.	16.39	.001	7.94	.01
28	Acceptability to Employers	5.40	n.s.	5.10	n.s.	1.41	n.s.	.00	n.s.
29	Access to Job Opportunities	2.03	n.s.	4.56	n.s.	2.80	n.s.	5.37	.05
30	Economic Disincentives	7.77	n.s.	7.40	.05	22.19	.001	5.87	.05

Table 24 (continued)

Relationship Between Functional Assessment Items and Four Outcome Variables for Minnesota Sample

Item		Service Costs		Service Outcomes		Work Status		Earnings at Closure	
#	Name	χ^2	P	χ^2	P	χ^2	P	χ^2	P
31	Strength: Physical Appearance	3.75	n.s.	1.68	n.s.	8.76	.05	3.04	n.s.
32	Strength: Personality	11.76	.01	.55	n.s.	2.46	n.s.	.28	n.s.
33	Strength: Intelligence	1.82	n.s.	7.90	.05	6.30	.05	2.41	n.s.
34	Strength: Vocational Skill	1.28	n.s.	7.39	.05	10.92	.01	1.67	n.s.
35	Strength: Education	3.88	n.s.	1.30	n.s.	.02	n.s.	.61	n.s.
36	Strength: Supportive Family	1.60	n.s.	21.41	.001	7.11	.05	1.13	n.s.
37	Strength: Sufficient Money	9.27	.05	10.97	.01	1.68	n.s.	5.75	.05
38	Strength: Motivation	9.70	.05	6.13	.05	5.98	n.s.	1.47	n.s.
39	Strength: Job Available	1.15	n.s.	1.82	n.s.	3.30	n.s.	2.37	n.s.
40	Strength: Initiative & Prob. Solving	.63	n.s.	.63	n.s.	.51	n.s.	.15	n.s.

N = 319 - Service Costs
N = 339 - Service Outcome
N = 231 - Work Status
N = 167 - Earnings at Closure

Table 25

Correlations Between Total FL Score, Total Strengths and Outcome Variables - Minnesota Sample

Outcome Variable	Total FL r	Total FL p	Total Strengths r	Total Strengths p
Service Costs	.373	.001	-.213	.05
Service Outcome (Closed Rehab'd vs. Still in System vs. Closed Not Rehabilitated)	-.040	n.s.	.069	n.s.
Work Status at Closure (Competitive Work vs. Noncompetitive Work vs. Not Working)	.497	.001	-.236	.05
Earnings at Closure (Less than $100/week vs. $100/week or more)	-.506	.001	.233	.05
Sermon Case Difficulty Index (Low vs. Medium vs. High)	-.163	.05	.201	.05

An additional variable is shown on that table, the Sermon Case Difficulty Index. This is a weighted case closure method developed by Minnesota DVR (Sermon, 1972). It reflects the failure rate among clients in various diagnostic categories with a high score indicating a relatively high rate. It is interesting that this index is negatively correlated with Total FL score and positively correlated with Total strengths. The most likely explanation is the high correlation between functional limitations and closure in noncompetitive work, a category that represents success in Sermon's formula.

Relationships Between Items and Outcome Variables

Another way to look at these data is to summarize the relationships between each of the items and the outcome measures.

Vision and Hearing were not significantly related to any of the dependent variables, possibly because of the low frequency with which they occurred in this population.

Ambulation/Mobility impairments are more frequent among people who were closed not rehabilitated or who were still in the VR system than among those who had been successfully closed. This function was not related to service costs or to earnings at closure.

Upper Extremity Functioning was not significantly related to outcome.

Hand Functioning impairment was more frequent among clients in noncompetitive work and those with low earnings. People without this impairment are more likely to be either in competitive work or not working at all.

Coordination showed the same pattern of relationships as did Hand Functioning.

Capacity for Exertion was more likely to be impaired for people still in the VR system than for those who had been closed. Of those who were closed, it was most likely to be a problem for noncompetitive workers. Clients without this impairment were more likely to be in competitive settings and to be earning higher wages.

Endurance is not likely to be impaired among clients who are closed rehabilitated and who are high earners.

Motor Speed is more likely to be a problem among noncompetitive workers and low earners. People who are competitively employed are unlikely to have this impairment.

Learning Ability impairments are slightly more frequent among people who are closed rehabilitated than among those not rehabilitated. Clients still in the VR system are unlikely to have this impairment. Most noncompetitive workers have this limitation whereas most competitive workers do not. Those who are not working are about evenly divided in that respect. About three quarters of clients without impairment of learning ability are high earners while a small majority of those who do have an impairment are low earners. Service costs tend to be higher for those with an impairment in this area.

Judgment limitations are most frequent among people who are not working or who are in noncompetitive work. Higher service costs are also associated with this impairment.

Persistence limitations are rare among people still in the rehabilitation system as well as among people working competitively or those receiving higher wages. People who are not working are somewhat more likely, and those in noncompetitive work or in low paying jobs are most likely to have this impairment. Clients in the low service cost groups are unlikely to have difficulty with this area.

Perceptual Organization was rated as a limitation for about half of noncompetitive workers, but it was rare among both the competitive and nonworkers. Those with impairment are more likely than others to be low earners and to be high cost clients.

Memory impairments followed the same pattern as described for Perceptual Organization.

Language Functioning limitations were more often found among clients with high service costs who went into noncompetitive work. High earners were very unlikely to have this impairment, but it was noted for about one-third of low earners.

Limitations of Ability to Read and Write were most often associated with noncompetitive work, low earnings and high service costs. People without this impairment were most likely to be high earners.

Congruence of Behavior with Rehabilitation Goals was not significantly related to any of the outcome variables.

Accurate Perception of Capabilities and Limitations was least frequently a limitation for clients still in the VR system and most frequent among those closed not rehabilitated. It was not correlated with work status at closure, earnings, or service costs.

Effective Interaction with People was most frequently a problem for clients who had been closed rehabilitated while it was least frequent among those still in the system. People with this impairment were most likely to be in noncompetitive work and to have been high in service cost. Those without the impairment were more likely to be high earners.

Personal Attractiveness is a more frequent limitation for high cost clients and those in noncompetitive work. About half of low earners had limitation in this area, but it was rare among high earners.

Loss of Time from Work was rarely a problem for those who were closed rehabilitated. This area was not significantly related to work status at closure, earnings, or service costs.

Stability of Condition was most frequently a limitation for clients still in the VR system and least frequently for those closed rehabilitated. People in noncompetitive work were least likely to be rated as impaired in this area, whereas those in competitive work and those not working were about equal. This area was not related to earnings or service costs.

Skills were noted as a limitation for a majority of all clients. Of those without an impairment, most were in competitive employment while the highest proportion of those who were impaired were in non-competitive work. This area was not significantly related to service outcome, earnings or service costs.

Work Habits were least likely to be impaired among clients still in the rehabilitation system. Of those who had been closed, competitive workers were least likely to have an impairment and noncompetitive workers most likely. High cost clients and low earners were most likely to be impaired in this area.

Work History was noted as a limitation for almost all of the noncompetitive workers and for about half of the others. Almost all of the highest cost clients had this impairment. A majority of low earners and about half of the high earners were rated as impaired.

Acceptability to Employers was not significantly related to the outcome variables.

Access to Job Opportunities was most frequently identified as a limitation among low earners. This item was not significantly related to other outcome variables.

Economic Disincentives were noted as an impairment most frequently among clients in noncompetitive work and least often among those in competitive employment. Those not working were in between the other groups. High earners were less likely than low earners to be rated as impaired on this item. It was not related to service costs.

Social Support System is most often a problem for people who were closed not rehabilitated and least often for those still in the VR system. Only one-third of the lowest cost clients had this limitation compared with more than half of the highest cost group. This item was not related to work status at closure or to earnings.

Unusually attractive physical appearance: Almost all people with this strength were in competitive employment.

Exceptionally pleasing personality: Clients in the highest service cost group were very unlikely to have this asset.

Extremely bright or verbally fluent: Clients with this asset are most likely to still be in the rehabilitation system and least likely to be closed, not rehabilitated.

Possesses vocational skill in great demand: This asset was rarely checked, but almost all to whom it applied were closed rehabilitated in competitive employment.

Excellent educational credentials: This strength was even rarer than vocational skill and was not significantly related to outcome variables.

Exceptionally understanding and supportive family: Very few people with this strength were closed not rehabilitated. They were almost equally divided between successful closure and still in the VR system. Most of those closed were in competitive work. It was not significantly related to service costs or earnings.

Sufficient financial resources for rehabilitation: People with this strength had a somewhat higher probability of still being in the VR system. Of those closed, they were somewhat more likely to be high earners. They were also more likely to be low service cost clients and less likely to be in the highest cost groups.

Extremely motivated to succeed vocationally: This strength was most frequently checked for those still in the rehabilitation system. The highest cost clients were least likely to have this strength. It was not related to work status or earnings.

Job is available for client with previous or current employer: This strength was so rare that there were no statistically significant differences. However, 6 of the 7 people to whom it applied were in the high earnings group.

Other strength: Very rarely checked. No significant relationships.

Finally, Table 26 shows the results of stepwise multiple regressions of individual items, factor scores, demographic variables, and counselor ratings to the outcome variables. Three variables contributed to a multiple r of .587 in the prediction of Service Cost: learning ability, the DVR category severely handicapped, and effective interaction with people. Prediction of Service Outcome was not successful, since none of the variables met the criterion for inclusion in an equation. Total FL score was the first variable in both of the remaining equations. Together with social support system and effective interaction with people it contributed to a multiple r of .553 in the prediction of Work Status at Closure. Seven additional variables contributed to a multiple r of .684 in the prediction of Earnings at Closure.

Table 26

Stepwise Multiple Regression of Functional Limitations, Strengths, Demographic Variables, and Counselor Ratings to Rehabilitation Outcome Measures - Minnesota Sample

Outcome Variable	Variables in Equation	Multiple R	R^2
Service Cost	Step 1 - FAI Item 12, Learning Ability	.518	.268
	Step 2 - DVR Category, Severely Handicapped	.562	.316
	Step 3 - FAI Item 22, Effective Interaction with People	.587	.345
Service Outcome (Closed Rehabilitated vs. Closed Not Rehabilitated vs. Still in System	No variables met criteria.		
Work Status at Closure (Competitive Work vs. Noncompetitive vs. Not Working)	Step 1 - Total FL score	.497	.247
	Step 2 - FAI Item 23, Social Support System	.522	.272
	Step 3 - FAI Item 22, Effective Interaction with People	.553	.301
Earnings at Closure	Step 1 - Total FL score	.498	.248
	Step 2 - FAI Item 26, Work Habits	.530	.281
	Step 3 - Factor score, Adaptive Behavior	.578	.334
	Step 4 - FAI Item 22, Effective Interaction with People	.611	.374
	Step 5 - FAI Item 9, Endurance	.641	.411
	Step 6 - FAI Item 11, Stability of Condition	.654	.428
	Step 7 - Marital Status	.673	.453
	Step 8 - FAI Item 10, Loss of Time from Work	.684	.468

SECTION V - COMPANION INSTRUMENTS IN THE FUNCTIONAL ASSESSMENT SYSTEM

THE PERSONAL CAPACITIES QUESTIONNAIRE

The Personal Capacities Questionnaire is an item-by-item translation of the FAI into first person terms. It is designed to be completed by the rehabilitation client rather than the counselor. Basically, it provides the client with an opportunity to describe his or her own work-related strengths and limitations. It has the advantage of generating substantial information without requiring counselor time. It may also serve to impress the client with the complexity of vocational choice, and may help him or her to understand why time and careful planning is necessary.

Financial support has not been located to undertake field testing of the PCQ, but the authors hope it can begin soon. Many intriguing questions wait to be answered including the relationship between counselor and client perceptions of functional limitations. Would the basic dimensions of limitation be replicated using client-generated data? Would clients or counselors be better at predicting rehabilitation outcomes? Perhaps most importantly, what contribution could such an instrument make to the counseling process?

THE REHABILITATION GOALS IDENTIFICATION FORM

The primary purpose of the FAI is diagnostic. It is intended to help the counselor gather and organize information about all areas of function prior to developing and implementing a vocational plan. The authors identified Goal Attainment Scaling (GAS) as a means for counselors to take this information and utilize it in selecting services, setting goals and evaluating rehabilitation outcomes.

GAS was designed by Kiresuk and Sherman (1968) and has been widely used in the evaluation of mental health programs. It has also been applied in a variety of other settings including schools and businesses and has even been called the most popular evaluation technique in the human services (Jacobs & Cytrynbaum, 1977). This technique helps the user to specify one or several behavioral goals, frame them in measurable terms, and set them within a spectrum of alternative outcomes.

The Rehabilitation Goals Identification Form is an adaptation of Goal Attainment Scaling to rehabilitation. The authors intended that counselors would use it in the following way. First they would complete the FAI and identify any of the functional limitations that might be modifiable. Next, goals would be set using the RGIF and decisions would be made about the services to be provided. This format requires the user to describe the intended outcome within a particular time framework and then to also define the poorest outcome that is possible and the best that might be obtained given the services that will be offered. Intermediate possibilities are also specified. Both the content areas and the level of achievement are uniquely tailored to the individual client.

When the services have been utilized and the agreed upon follow-up time has arrived, the client would be reviewed to see to what degree each goal had been reached. The goal attainment scaling process allows for calculation of a numerical outcome score that represents the degree to which goals were reached in all of the specific areas. This process is not unlike that of writing and evaluating an IWRP, although it is somewhat more highly structured.

THE PERSONAL GUIDE TO REHABILITATION GOALS

The fourth instrument in the Functional Assessment System, the Personal Guide to Rehabilitation Goals (PGRG) is a parallel form of the RGIF. It is written in a programmed format so that a client might be able to design his or her own rehabilitation goals, either alone or with assistance from the counselor. The person is provided first with examples of behaviorally scaled goals and then directed step-by-step through the process of creating them. The product is a completed goal attainment grid, something which could be very useful to a rehabilitation counselor. Not only would the client be helped to think clearly about what he or she wants out of rehabilitation, but it would also provide direct information to the counselor about the client's hopes and plans.

SECTION VI - REFERENCES

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SECTION VII - APPENDICES

FUNCTIONAL ASSESSMENT INVENTORY

MATERIALS DEVELOPMENT CENTER

INSTRUCTIONS

GENERAL

The emphasis in these ratings is on function or performance. The primary purpose, assessing an individual's capacity for work or other productive activity, determined the level of specificity of the items. The benchmarks chosen to describe the various levels of impairment also reflect the vocational emphasis of the inventory. While the authors selected descriptive points that they considered critical, judgment will inevitably be required in order to fit individuals into the available categories. In a particular case, if the appropriate rating is not clear on the basis of the behavioral descriptors, the levels may be regarded as representing the following scale: (0) no limitation, (1) mild impairment, (2) moderate impairment, and (3) severe impairment. A rating of "no significant impairment" should be used whenever the trait or quality being rated is within the normal range of variability and is unlikely to affect the client's vocational options or potential. Unless otherwise specified, the ratings should reflect a person's current level of functioning, utilizing whatever adaptive equipment may be available to him or her. Record only one score per item.

Because employability depends on more than an individual's personal characteristics, the inventory also includes a number of social and environmental items. Although these items are not actually measures of functional capacities or limitations, the authors believe that they must be considered in the vocational planning process. Furthermore, they may contribute to the prediction of vocational outcomes.

Some functional limitations may be reduced as a result of rehabilitation services,while others may be permanent. The latter can only be worked around in the course of developing a vocational plan. To separate these kinds of limitations, the rater is asked, while completing the inventory, to place a check mark (✓) beside all those functional limitations items reflecting impairments that may be reduced through rehabilitation services.

The Functional Assessment inventory is intended to organize and focus work-related information rather than to generate new data about clients. Therefore, it will draw upon and not replace interviewing, psychometric testing, and work evaluation.

Normative data are available in the Functional Assessment Inventory Manual.

SPECIAL INSTRUCTIONS FOR FUNCTIONAL LIMITATIONS RATING SCALES

Item #1: Individuals who could likely manage a community college or vocational course without requiring special instructional methods or accommodations would be rated as 0. Persons rated at level 1 would be able to succeed at such programs only with some accommodations such as tutorial help or reduced load. This includes people with learning disabilities as well as those of low average or borderline intelligence. Level 2 would include most people classified as "educable" mentally retarded and those who would need an on-the-job or practical training program rather than one involving academic instruction. Level 3 would include those with more severe limitations of learning ability including those at the "trainable" level or lower and others who have severe learning problems, regardless of IQ score.

Item #3: Level 1 refers to a memory impairment significant enough to interfere to some degree with day-to-day functioning, but not to occasional absentmindedness. If the client has adequate short-term memory but has an impairment of distant memory (e.g., amnesia), the rater should make a judgment as to whether the problem seems vocationally insignificant (level 0) or represents a mild (level 1), moderate (level 2), or severe (level 3) limitation.

Item #4: This scale refers to the ability to integrate and comprehend sensory information. Ordinarily, this pertains primarily to the use of visual data. For a client with visual impairment, the ability to utilize other sensory information for purposes of orientation and discrimination is also relevant.

Item #5: The rating should reflect the client's level of functioning while using any available correction such as eyeglasses or contact lenses. Ratings of visual impairment should not be limited to defects in the eye itself: any perceptual or visual field problems (e.g., field cuts) should also be taken into account. Color blindness that limits vocational options should be rated as 1.

Item #6: This item refers to the ability to perceive the spoken word and other vocationally relevant sounds. The rating should reflect the client's level of functioning while using any available assistance such as a hearing aid.

Item #8: A language functioning deficit may be due to a disability such as aphasia or to the client's cultural background, or to a learning disability. A client who has some difficulty understanding oral comunications due to a learning disability would ordinarily be rated at level 1. If the deficit is particularly severe, level 2 may be more appropriate.

Item #10: This scale may relate to vision-impaired clients who use Braille. Level 1 would include those persons whose sensory impairment would interfere to some degree with learning or using Braille. Level 2 would include those individuals whose impairment is sufficient to prevent any use of Braille. For any client, regardless of disability, level 3 applies when the hands cannot be used for activities of daily living.

Item #11: Persons rated at level 1 would be somewhat slower than average so competitive jobs requiring physical speed would generally not be suitable. Those at level 2 are slower, but they would be able to work fast enough to meet sheltered workshop standards. People with generalized motor slowing at level 3 would probably not meet sheltered workshop standards. If paralysis or weakness affects speed in some muscle groups while leaving others intact, the rater should make a judgment as to whether the impairment seems insignificant (level 0) or represents a mild (level 1), moderate (level 2), or severe (level 3) limitation for that person. Quadriplegia would ordinarily be rated at level 2 or 3.

Item #12: The following are guidelines for rating this item:

Level 1:
- a) persons with limitations in speed or distance of walking; or
- b) persons with a visual, cognitive, or any other impairment that mildly affects their mobility but who are still capable of getting around in the community on their own.

Level 2:
- a) persons who do not use a wheelchair but who can walk only for very short distances over flat surfaces.
- b) persons who use a wheelchair independently in a relatively barrier-free environment (i.e., they get into and out of it and propel it without assistance); or
- c) persons with a visual, cognitive, or any other disability that sometimes requires them to have assistance from others in order to get around the community.

Level 3:
- a) persons who use a wheelchair and need help getting into or out of it, but who are otherwise able to travel without help; or
- b) persons who cannot get around in the community unless they have help from others.

Item #13: This item reflects a person's ability to perform physical labor such as, lifting, bending, climbing, and carrying. Cardiac status, mobility, and muscular strength are all relevant. Persons who could generally handle jobs rated as "medium" by the Department of Labor would be rated at the level 0. Level 1 includes those who would have difficulty with many medium jobs, but who would be physically capable of almost all jobs rated as "light." At level 2 people can handle some light jobs, but not others (for example, they may be able to do the lifting required by some of the jobs but not the walking or standing required by others). At level 3 appropriate vocational options would be restricted to those rated as sedentary.

Item #15: This item refers to the extent of absenteeism that may be expected due to behavioral or physical causes. If the client is not currently working, use past behavior or present activity level to predict a likely rate of absenteeism.

Item #16: This item refers to the stability of the disabling condition over time. It is intended to reflect long range trends and also vulnerability to major fluctuation characteristic of some disabilities, such as chemical dependency or psychiatric illness.

Item #18: The rating may reflect any of a variety of characteristics that could influence employer receptivity to the client. Some may be disability-related. (For example, a history of back problems could make a client difficult to place, even in jobs that do not require physical exertion.) Others may be demographic or social (e.g., ethnic background, middle or advanced age, or sexual preference). Even though discrimination in these areas may be unlawful, the rater should indicate the extent to which they may realistically be expected to affect the client's prospects for employment.

Item #19: The rating should reflect the response that might be expected from a "typical" employer. Obviously a counselor's personal reaction may be different from that of employers who are not used to being with disabled individuals; however, an estimate of anticipated employer response should be made.

Item #20: This item refers to skills which the individual possesses after onset of disability.

Item #22: The focus of this item is on the kinds of interpersonal skills required to obtain a job and then to maintain satisfactory relationships with supervisor and co-workers. Other kinds of personal relationships are relevant only to the extent that they affect employability. In the case of individuals who have a communication or language impairment, a limitation may be reflected in terms of ability to interact with the working world, even if no problems exist in relationships with the client's own cultural subgroup.

Item #25: "Support system" refers primarily to family and close friends or the people with whom the client is living.

Item #29: Because of the author's desire to describe limitations in functional terms rather than to infer underlying states such as "motivation," the alternatives for this item are behavior referents. "Rehabilitation program" refers to the broadest purposes for the counselor's work with clients (e.g., vocational rehabilitation or independent living). The term does not imply that specific occupational or personal goals have already been determined.

STRENGTH ITEMS

The strength items are meant to account for the special instances when a particular asset may be of sufficient strength to override a client's limitations. They, in effect, serve as moderator variables; that is, in some cases they may improve the prediction of vocational success. These items are not scaled along a four-point continuum. Instead, the rater is simply asked to check an item if it is considered an outstanding asset for the individual.

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Menomonie, Wisconsin 54751

FUNCTIONAL ASSESSMENT INVENTORY

MATERIALS DEVELOPMENT CENTER

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Gary T. Athelstan, Ph.D. Professor, Department of Physical Medicine and Rehabilitation, University of Minnesota

This study was supported in part by Social and Rehabilitation Service Research and Training Grant Number 16-P-56810.

1. LEARNING ABILITY(See Instructions.)
   0. No significant impairment.
   1. Can learn complex, employable skills but not at a normal rate of speed.
   2. Can master fairly complex ideas and operations with special training.
   3. Is capable of learning only very simple tasks and then only with adequate time and repetition.
2. ABILITY TO READ AND WRITE IN ENGLISH
   0. No significant impairment.
   1. Has some difficulty reading or writing the English language due to lack of education or foreign language background; or cannot read standard print due to vision but can use Braille or large print.
   2. Has considerable difficulty with reading or writing the English language.
   3. Is unable to read or write English in print or Braille.
3. MEMORY (See instructions.)
   0. No significant impairment.
   1. Occasional memory deficit causes some difficulty.
   2. Memory deficit interferes significantly with new learning. Information or directions must be repeated frequently.
   3. Is confused or disoriented. Remembers very little from day to day.
4. SPATIAL AND FORM PERCEPTION (See Instructions.)
   0. No significant impairment.
   1. Difficulty with perception interferes with tasks requiring fine discrimination.
   2. Occasionally gets lost or shows other evidence of perceptual impairment in daily living.
   3. Extreme perceptual distortion evidenced by behavior (e.g., becoming lost even in familiar places or inability to identify objects.)
5. VISION (See Instructions.)
   0. No significant impairment.
   1. Has difficulty handling work involving fine visual details.
   2. Impairment is sufficient to interfere with major activities such as driving or reading.
   3. Total or nearly total loss of vision. (Uses cane for mobility outdoors.)
6. HEARING (See Instructions.)
   0. No significant impairment.
   1. Has some difficulty understanding conversation or using a telephone.
   2. Can handle face-to-face conversation with the help of lipreading, but is unable to use a standard telephone. Is unable to pick up certain environmentally relevant sounds (e.g., bells or high-pitched tones).
   3. Extremely hard-of-hearing or deaf; or is unable to comprehend any speech.
7. SPEECH
   0. No significant impairment.
   1. Speech is easily intelligible, but voice quality or speech pattern is distracting; or speech can be easily intelligible with special effort (e.g., taking care to talk slowly).
   2. Speech is difficult to understand. Repetition is often necessary.
   3. Speech is not usable as a means of communication.

8. **LANGUAGE FUNCTIONING** (See Instructions.)
    0. No significant impairment.
    1. Ability to communicate orally in the English language may be slightly to moderately impaired. If hearing-impaired, is able to use lipreading and speech to communicate.
    2. Has considerable difficulty communicating. Is limited to single words or short phrases or to simple concepts that can be communicated nonverbally. If hearing-impaired, uses sign language effectively but does not lipread or speak.
    3. Verbal communication is nearly impossible.
9. **UPPER EXTREMITY FUNCTIONING**
    0. No significant impairment.
    1. Partial or total loss of functioning in one upper extremity. The other is intact and functions well.
    2. Loss of function to at least some extent in both upper extremities; or severe loss of functioning in dominant side.
    3. No useful functioning in either upper extremity.
10. **HAND FUNCTIONING** (See Instructions.)
    0. No significant impairment.
    1. Would be unable to perform most tasks requiring fine dexterity, speed, or coordination.
    2. Seriously impaired, but with or without the use of aids or prostheses can write and perform activities of daily living, such as feeding.
    3. Little or no hand functioning.
11. **MOTOR SPEED** (See Instructions.)
    0. No significant impairment.
    1. Moves more slowly than average.
    2. Moves very slowly.
    3. Extreme motor retardation.
12. **AMBULATION OR MOBILITY** (See Instructions.)
    0. No significant impairment.
    1. Mild impairment, but does not require assistance from others to get around in the community.
    2. Moderate impairment. Sometimes requires help from others in order to get around in the community.
    3. Severe impairment. Usually requires assistance from others in order to get around in the community.
13. **CAPACITY FOR EXERTION** (See Instructions.)
    0. No significant impairment.
    1. May encounter some difficulties in occupations requiring substantial physical exertion (e.g., occupations requiring frequent lifting of 25 lbs. or a great deal of walking or bending). However, physical activity in moderate amounts is acceptable.
    2. Occupations requiring moderately strenuous physical activity are ruled out. Limited to jobs classified as light by the Department of Labor.
    3. Limited to sedentary jobs.
14. **ENDURANCE**
    0. No significant impairment.
    1. Can work a full day with special rest periods arranged.
    2. Can work only part-time (16 to 32 hours per week).
    3. Unable to work for more than one or two hours a day (15 hours or less per week).
15. **LOSS OF TIME FROM WORK** (See Instructions.)
    0. No significant impairment.
    1. Requires 1-2 days or parts of several days off each month for medical supervision, therapy (including psychotherapy), or recurring medical or personal problems.
    2. Requires an average of one day off each week.
    3. Requires frequent or extended absences from jobs.
16. **STABILITY OF CONDITION** (See Instructions.)
    0. No significant impairment.
    1. Stable if controlled by diet, treatment, or exercise.
    2. Condition is likely to be slowly progressive; or course is unpredictable and may result in further loss of functioning.
    3. Condition is likely to worsen significantly in the foreseeable future.
17. **WORK HISTORY**
    0. No significant impairment.
    1. Has little or no work experience due to youth or other reasons acceptable to most employers; or had a good work record prior to disability, but has now been out of work for more than one year.
    2. Work history includes negative aspects, such as frequent tardiness or frequent job changes with periods of unemployment.
    3. Work history is a clear liability, possibly including long periods of unemployment and poor references.
18. **ACCEPTABILITY TO EMPLOYERS** (See Instructions.)
    0. No significant impairment.
    1. Some physical, demographic, or historical characteristics may interfere with client's acceptability to some employers.
    2. Possesses characteristics which have a very low degree of employer and public acceptance, despite their lack of interference with performance (e.g., age, controlled epilepsy, or history of severe or recurring mental illness).
    3. Current or recent characteristics which cannot be avoided or modified are likely to make this person unacceptable to most potential employers (e.g., recent criminal history, uncontrolled epilepsy, or noticeable behavior deviation).
19. **PERSONAL ATTRACTIVENESS** (See Instructions.)
    0. No significant impairment.
    1. Some aspect of personal appearance or hygiene is unattractive to others but tolerable with familiarity.
    2. Has more severe problems with personal appearance or hygiene that are difficult for others to accept even with familiarity.
    3. Very severe problems with personal appearance or hygiene are likely to cause avoidance by others.

20. SKILLS (See Instructions.)
    0. No significant impairment.
    1. No available skills that are job-specific. However, possesses general skills (i.e., educational or interpersonal) that could be used in a number of jobs.
    2. Has few general skills. Job-specific skills are largely unusable due to disability or other factors.
    3. Has no job-specific skills and has very few general or personal skills transferable to a job situation.
21. ECONOMIC DISINCENTIVES
    0. No significant impairment.
    1. Potential for employment is affected to some degree by economic disincentives (e.g., may need an unusually high salary or special conditions that could be difficult to find).
    2. Job options are quite restricted because of potential loss of benefits (e.g., may choose to consider only part-time or low-income jobs that allow benefits to continue).
    3. In all probability cannot afford to take a job or will choose not to take a job because of resulting loss of benefits (e.g., financial support, medical coverage, or attendant care).
22. ACCESS TO JOB OPPORTUNITIES
    0. No significant impairment.
    1. Employment opportunities are somewhat limited (e.g., due to transportation problems or geographic location).
    2. Employment opportunities are significantly limited. Few accessible and appropriate work settings are available.
    3. Extremely limited opportunities. May be homebound or living in an area where very few jobs exist.
23. REQUIREMENTS FOR SPECIAL WORKING CONDITIONS
    0. No significant impairment.
    1. Placement options are limited to some degree by disability requirements. (e.g., may need freedom to sit, stand, and move around as needed, or may need to avoid exposure to dangerous equipment.)
    2. Multiple environmental restrictions related to the disability substantially limit placement alternatives.
    3. Capable of functioning only in highly selected settings. Special placement efforts essential.
24. WORK HABITS
    0. No significant impairment.
    1. Is deficient in work habits (e.g., punctuality, ability to persist at work tasks with minimal supervision, or appropriate interview behavior). However, is willing and able to learn these skills quite readily.
    2. Work habit deficiencies may require that work adjustment training precede employment.
    3. Has severe deficiencies in work habits and seems to have little potential for improving through work adjustment training.
25. SOCIAL SUPPORT SYSTEM (See Instructions.)
    0. No significant impairment.
    1. Little or no support system available.
    2. Support system at times encourages values or behaviors that are contrary to rehabilitation goals.
    3. Support system is clearly working against rehabilitation behaviors.
26. ACCURATE PERCEPTION OF CAPABILITIES AND LIMITATIONS
    0. No significant impairment.
    1. Has an inadequate understanding of what his or her vocational capacities are as a result of disability (e.g., may rule out too many vocational possibilities or deny the significance of some limitations).
    2. Has an unrealistic understanding of his or her vocational capacities (e.g., may rule out all vocational possibilities or deny important limitations).
    3. Refuses to accept or significantly distorts his or her limitations. Frequently gives others false, misleading, or extremely inappropriate information about the disability.
27. EFFECTIVE INTERACTION WITH EMPLOYERS AND CO-WORKERS (See instructions.)
    0. No significant impairment.
    1. Is somewhat awkward or unpleasant in social interactions.
    2. Lacks many of the skills necessary for effective social interaction.
    3. Overtly aggressive, withdrawn, defensive, bizarre, or inappropriate behavior often impairs personal interactions.
28. JUDGMENT
    0. No significant impairment.
    1. Sometimes makes unsound decisions. Does not take time to consider alternatives or consequences of behavior.
    2. Frequently makes rash or unwise decisions. Often displays inappropriate behavior or choices.
    3. Could be dangerous to self or others as a result of foolish or impulsive behavior.
29. CONGRUENCE OF BEHAVIOR WITH REHABILITATION GOALS (See Instructions.)
    0. No significant impairment.
    1. Behavior with respect to rehabilitation program appears inconsistent (i.e., it varies from day to day or from one area to another).
    2. May express desire to work but often does not act accordingly.
    3. Behavior is often in contradiction to goals of program.

30. **INITIATIVE AND PROBLEM-SOLVING ABILITY**
   0. No significant impairment.
   1. Is able to see alternatives and work effectively toward solutions to problems, but needs frequent direction and encouragement to take action.
   2. Often needs help identifying tasks or solutions to problems, and needs repeated urging to take action.
   3. Usually seems unable to identify tasks or possible solutions to problems. Needs constant urging to undertake tasks and seldom completes them without help.

STRENGTH ITEMS (Check all that apply.)

31. Has an unusually attractive physical appearance.
32. Has an exceptionally pleasing personality.
33. Is extremely bright, or has an exceptional verbal fluency.
34. Possesses a vocational skill that is in great demand.
35. Has excellent educational credentials qualifying him or her for employment desired..
36. Client's family is exceptionally supportive of rehabilitation.
37. Has sufficient financial resources to maintain self and family during period of rehabilitation.
38. Is extremely motivated to succeed vocationally.
39. Job is available for client with previous or current employer.
40. Has an unusual ability to take initiative and solve problems.

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FUNCTIONAL ASSESSMENT INVENTORY

SCORING SHEET

Client ______________________ Date ______________________

ID # ____

Medical Diagnosis ______________________________________

Age ______________________ Counselor ______________________

Sex ______________________ Counselor ID # ______________________

Functional Limitations Rating Scales

Score	(√)*	Score	(√)*	Score	(√)*	Score	(√)*
1. _____	___	9. _____	___	17. _____	___	25. _____	___
2. _____	___	10. _____	___	18. _____	___	26. _____	___
3. _____	___	11. _____	___	19. _____	___	27. _____	___
4. _____	___	12. _____	___	20. _____	___	28. _____	___
5. _____	___	13. _____	___	21. _____	___	29. _____	___
6. _____	___	14. _____	___	22. _____	___	30. _____	___
7. _____	___	15. _____	___	23. _____	___		
8. _____	___	16. _____	___	24. _____	___		

*Check all limitations that may be reduced through rehabilitation services.

Strength Items

31. ____
32. ____
33. ____
34. ____
35. ____
36. ____
37. ____
38. ____
39. ____
40. ____

* * *

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PERSONAL CAPACITIES QUESTIONNAIRE

MATERIALS DEVELOPMENT CENTER

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This work is supported in part by Social and Rehabilitation Service Research and Training Grant Number 16-P-56810.

Directions

Finding out what are your strengths and weaknesses is a very important part of your vocational rehabilitation program. This questionnaire will help you and your counselor decide what you can and cannot do in relation to working. After you have completed this form, the two of you can plan together a program that will best meet your specific needs.

For the first 30 questions, you will be asked to rate yourself on a scale of 0, 1, 2, or 3. Next to numbers in each scale are short statements describing how you would act or appear if you had no limitations (0), some (1), quite a bit (2), or a great amount (3) of limitation. For each question choose the statement that best describes you. Then mark your answer on the answer sheet by circling the number that matches that statement. (For example, for Question #6, if you do not have any difficulty hearing, you would mark your answer on the answer sheet in the following way: 6. [✓ 0] 1 2 3.)

Questions #31 to #40 are a list of exceptional positive qualities that could help you in getting a job. Put a check mark (✓) on the answer sheet for any of them that apply to you.

In questions #41 and #42, you will be asked to make some general ratings about yourself. For each of these questions, circle the number on the answer sheet that best applies to you.

Some of the questions refer to things that have to do with working. If you have never worked, try to imagine what you would be like if you were to work or try to recall what you were like in school or in a previous training program.

---

1. LEARNING ABILITY
    0. I learn just as fast as other people.
    1. I can learn difficult things, but I need extra time.
    2. In school I was in special classes for students who needed extra help.
    3. Learning is very hard for me. I need extra time and help to learn most new things.
2. READING AND WRITING IN ENGLISH *(in print or in braille)*
    0. I have no trouble reading and writing English.
    1. I have a little trouble reading or writing English *(for any reason; for example, lack of good schooling or because the first language I learned was not English.) (If I am visually impaired, I cannot see regular print, but I can use large print or Braille.)*
    2. It is very hard for me to read or write English.
    3. I cannot read or write English.
3. MEMORY
    0. My memory is good.
    1. Forgetting things is often a problem for me.
    2. Memory problems often make it hard for me to learn new things. I usually need to have directions and information repeated to me.
    3. My memory is very poor, I often feel confused. It is hard for me to remember things from one day to the next.
4. PERCEPTION
    0. When I look at things, they never seem confused or mixed-up.
    1. I don't do well at work that requires looking closely at details.
    2. It is very hard for me to follow maps, to put together jigsaw puzzles, or to do other things that require me to see how things fit together.
    3. The world seems confusing or mixed-up to me. I often get lost, even in places that I know.

5. VISION *(with eyeglasses or contact lenses if you wear them)*
   0. I have no trouble seeing.
   1. It is hard for me to see small print.
   2. I cannot do some important activities *(for example, reading or driving)* because I cannot see well enough.
   3. I have little or no vision.

6. HEARING *(with a hearing aid if you use one)*
   0. I have no trouble hearing.
   1. I sometimes have trouble understanding conversations or using the phone.
   2. My hearing is so poor that I cannot use the telephone.
   3. I cannot hear conversation well enough to understand it.

7. SPEECH
   0. I have no difficulty speaking.
   1. People can understand my speech most of the time, but it may sound unusual.
   2. My speech is difficult for other people to understand. I often have to repeat myself.
   3. Most people cannot understand my speech.

8. SPOKEN COMMUNICATION
   0. I understand and speak English without any difficulty.
   1. I have some problem communicating in English with other people. *(If I am hearing impaired, I can use lipreading and speech to communicate.)*
   2. It is hard for me to communicate in English with most people. I cannot say more than a few words. *(If I am hearing impaired, I use sign language but cannot communicate through lipreading and speech.)*
   3. *I cannot communicate through spoken English with other people.*

9. USE OF ARMS
   0. Both of my arms work normally.
   1. My preferred arm *(my right if I am right-handed or my left if I am left-handed)* works well, but the other does not.
   2. Both of my arms are a little limited in how well they work.

      OR

      My preferred arm does not work well, but the other is okay.
   3. I have little or no use of either of my arms.

10. USE OF HANDS
    0. Both of my hands work normally.
    1. My hands are a little clumsy or slow.
    2. Use of my hands is quite limited, but *(with or without aids or devices)* I can write, feed myself, and do most or all ordinary self-care tasks.
    3. My hands work so poorly that I cannot do my own self-care.

11. SPEED
    0. I move as quickly as most people.
    1. I move a little more slowly than most people.
    2. I move quite slowly.
    3. I move very slowly.

12. ABILITY TO GET AROUND
    0. I am able to walk and to travel around town without difficulty.
    1. I do walk, but I have some difficulty getting around. *(For example, because of physical limitations or other problems that affect ability to travel in unfamiliar parts of town.).*
    2. Mobility is a significant challenge for me. *(Either you use a wheelchair independently, or else you walk but often need assistance from someone in order to get from place to place.)*
    3. I need the help of other people in order to get around. *(For example, you use a wheelchair and need help getting into and out of it, or you have any impairment that requires help from others to get around when you are away from home.)*

13. ABILITY TO DO HEAVY WORK
    0. I can do as much heavy work as most people of my age and sex.
    1. I am capable of a medium amount of physical activity, but I have to avoid hard work such as frequent lifting of more than 25 pounds or a lot of bending, walking, etc.
    2. I must avoid even a medium amount of heavy work *(such as housework)*. I could only handle a light job *(lifting of 10-20 pounds and some walking or standing).*
    3. *I need a job that will allow me to sit all or most of the time and that involves little or no lifting.*

14. ENDURANCE AND AVAILABLITY FOR WORK
    0. I can work a regular full-time job.
    1. I can work a full-time job if special rest periods are provided.
    2. I can work only a part-time job *(about 16-32 hours per week).*
    3. I can work only an hour or two per day *(15 hours per week or less).*

15. ABSENCE FROM WORK
    0. I rarely miss work because of illness, medical appointments, or personal reasons.
    1. I need to take a day or two per month off work.
    2. I am likely to miss about a day per week from work.
    3. I am frequently absent from work for medical or personal reasons.

16. **STABILITY OF CONDITION**
    0. My disability is stable. *(In other words, it will not become worse.)*
    1. My disability could become worse unless I keep it under control with diet, treatment, or exercise.
    2. My disability is slowly getting worse.

       OR

       It is hard to predict how my disability will change. It could stay the same, or it might get quite a bit worse.
    3. My disability is likely to become much worse in the future.

17. **WORK RECORD**
    0. I have a good, steady work record.
    1. I had a good work record until I became disabled. However, since then I have been out of work for more than a year.

       OR

       I have not had much opportunity to work in the past *(for a good reason, such as being too young.)*
    2. My job record is only fair. It includes some drawbacks such as frequent job changes or periods of unemployment.
    3. My work record is poor. I have been out of work a lot, or my references are poor.

18. **ACCEPTABILITY TO EMPLOYERS**
    0. Most employers would give me a fair chance if I were to apply for jobs.
    1. Employers are likely to be prejudiced against me because of my disability.
    2. Many employers would be reluctant to hire me because of my disability.
    3. Most employers wouldn't even consider hiring me.

19. **PERSONAL ATTRACTIVENESS**
    0. I am at least as attractive and well-groomed as most people.
    1. I have some problem with my appearance or hygiene, but people usually get used to it and accept me without much difficulty.
    2. People find it hard to accept me because of my appearance or grooming.
    3. Most people avoid me.

20. **SKILLS**
    0. I have some special skills that would be useful on a job.
    1. I do not have any special skills for working, but I have some education and can learn to do most jobs.
    2. I had some special skills, but I can't use them now that I am disabled.
    3. I have very little in the way of special or personal skills to offer an employer.

21. **FINANCES**
    0. My financial situation would improve if I got a job.
    1. My financial situation would improve by working only if I got a job with a high salary or some special conditions.
    2. I probably cannot afford to take a job that would cause me to lose my disability benefits. However, I would like to have some extra income from a part-time job or a low-paying, full-time job..
    3. I probably cannot afford to work at all because I might lose my disability benefits.

22. **AVAILABILITY OF JOB OPPORTUNITIES**
    0. There are some suitable jobs within a reasonable distance from my home, and I could get to them.
    1. Job opportunities are somewhat limited for me. *(For example, because of transportation problems, location of my home, or a poor economy.)*
    2. Job opportunities are very limited. *(For example, there are only a few suitable jobs or serious transportation problems.)*
    3. I have to work at home.

       OR

       There are almost no suitable jobs available in the community where I live.

23. **SPECIAL JOB REQUIREMENTS**
    0. I do not need any special working conditions or accommodations from an employer.
    1. The places I could work are limited to some extent by my disability. *(For example, I may need an accessible workplace or a job that will allow me to stand up and move around occasionally.)*
    2. I need special working conditions or arrangements that will probably be difficult to find.
    3. My disability puts strict requirements on the job I could take. *(For example, I cannot tolerate most environments because of severe allergies, or I have to avoid all stress because of emotional problems.)*

24. **WORK HABITS**
    0. I have good work habits *(for example, getting to work on time, keeping my mind on the job, dressing properly, etc.)*
    1. I have not had much opportunity to build work habits, but I am willing and able to develop them.
    2. My work habits are not good, so I would need some special training and practice before starting a regular job.
    3. My work habits are very poor, and I don't think there is much hope that they can be changed.

25. **ENCOURAGEMENT FROM FAMILY OR FRIENDS**
    0. I have family members or close friends who want to help me get back to work.
    1. No one is either encouraging me or discouraging me about going back to work.
    2. I think my family or friends might be happier if I stayed home instead of going back to work.
    3. My family or friends prefer that I not get a job.

26. **AWARENESS OF ABILITIES AND LIMITATIONS**
    0. I have a good understanding of what an employer would see as my strengths and weaknesses.
    1. I am not sure of just what I can or cannot do for work.
    2. My disability has not affected my ability to find and do work.

       OR

       It seems that most kinds of work are ruled out by my disability.
    3. It seems like there is nothing I can do because of my disability.

27. **GETTING ALONG WITH SUPERVISORS AND CO-WORKERS**
   0. I have always gotten along well with people at work.
   1. Getting along with people at work isn't always easy for me, but I manage to do it.
   2. I have had problems getting along with people at work.
   3. I have lost job(s) because I didn't get along with people at work.

28. **JUDGMENT**
   0. I act wisely all of the time.
   1. I sometimes make the wrong decision because I rush into things without thinking over the choices.
   2. I often get into trouble because of unwise decisions.
   3. I have caused accidental injury to myself or someone else either by doing something foolish or by forgetting to do something I should have done.

29. **DESIRE TO WORK**
   0. I very much want to work, and I am willing to do anything the rehabilitation program requires in order to get a job.
   1. I want to work, so I usually do what I am asked to do in the rehabilitation program.
   2. I would like to work, but sometimes I don't do the things that are required by the rehabilitation program.
   3. I would be willing to work, but many times I don't do the things required by the rehabilitation program.

30. **INITIATIVE AND PROBLEM-SOLVING ABILITY**
   0. I am good at seeing what needs to be done in a situation and going ahead to do it.
   1. I can usually figure out a solution to problems, but I often need help or encouragement from someone else to take action.
   2. I often need help from another person, both to see solutions to problems and to take action.
   3. I usually need help from someone else to solve problems or to finish important tasks.

SPECIAL STRENGTH ITEMS *(Put a check mark on the answer sheet for any that apply.)*

31. I am very good looking.
32. I have a very pleasing personality.
33. I am unusually intelligent.
34. I have a work skill that is in great demand by employers.
35. I am very well trained or educated.
36. My family is extremely understanding and eager to help me get to work.
37. I have no financial worries that could interfere with my rehabilitation program.
38. I am absolutely determined to get a job.
39. An employer that I know is already holding a job open for me.
40. I have unusually good common sense.

Please answer these additional questions by circling the number on the answer sheet that best applies to you.

41. Overall, how severely disabled do you think you are?

1	2	3	4	5	6	7
slightly		moderately		severely		very severely

42. What do you think are your chances of getting and holding a job?

1 poor (0-25%)	2 fair (26-50%)	3 good (51-75%)	4 excellent (76-100%)

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